

THE ASSAM GAZETTE

অসাধাৰণ EXTRAORDINARY প্ৰাপ্ত কৰ্তৃত্বৰ দ্বাৰা প্ৰকাশিত PUBLISHED BY THE AUTHORITY

নং 563 দিশপুৰ, সোমবাৰ, 1 আগস্ত, 2022, 10 শাওণ, 1944 (শক) No. 563 Dispur, Monday, 1st August, 2022, 10th Sravana, 1944 (S. E.)

GOVERNMENT OF ASSAM ORDERS BY THE GOVERNOR DEPARTMENT OF HOUSING AND URBAN AFFAIRS

NOTIFICATION

The 11th July, 2022

No.UDD(T)245/2022/6.- In exercise of the powers conferred by the Section 9 and Sub-section (1) of Section 10 of the Assam Town & Country Planning Act, 1959 (as amended) and (Assam Act II of 1960) read with sub-rule (1) of Rules 3 of the Assam Town & Country Planning (Publication of Master Plan and Zoning Regulations) Rules 1962, the Governor of Assam is pleased to publish the following notice regarding the publication of the Draft Revised Master Plan for Dibrugarh.

Notice for publication of the Draft Revised Master Plan for Dibrugarh

- It is notified that the Draft Revised Master Plan for Dibrugarh prepared by the Directorate of Town & Country Planning, Government of Assam, Town & Country Planning Act, 1959(as amended) read with Sub-section 1 of Section 10 of Assam Town & Country Planning Act, 1959 (as amended) for the area described in the schedule below is here by published.
- 2. Any person or persons affected by the Draft Revised Master Plan may submit their objections or opinions in writing to the Director of Town & Country Planning within two months from the date of publication.
- 3. The Draft Revised Master Plan with all relevant papers and maps may be inspected free of cost during the office hours at the office of Director, Town & Country Planning, Assam, Deputy Director, Town & Country Planning, Dist Office Dibrugarh, office of the Deputy Commissioner, Dibrugarh, office of the Chairman, Dibrugarh Development Authority, office of the Chairman, Dibrugarh Municipal Board & Office of the Dibrugarh (East & West) & Moran Revenue Circle. Copy of the Draft Revised Master Plan is available in the office of the Deputy Director, Town & Country Planning, Dist Office Dibrugarh for sale on payment.

SCHEDULE:

District : Dibrugarh

Revenue Circle : Dibrugarh East Revenue Circle,

Dibrugarh West Revenue Circle,

and Moran Revenue Circle

Block : Lahowal, Barbaruah, Khowang

Mauza : Dibrugarh, Mancotta-Khanikar, Jamirah,

Lahowal, Larua and Modarkhat

Master Plan : Dibrugarh

Existing Master Plan Area : 71.83 Sq.km.

Revised Master Plan Area : 391.00 Sq.km

Municipal Area : 15.5 Sq.km. Urban Area (MB+OG+CT) : 24.03 Sq.km.

Village Area : 366.97 Sq.km.

REVENUE AREAS INCLUDED IN DRAFT REVISED MASTER PLAN FOR DIBRUGARH

S1. No.	Town /OG/CT/Village Name	Mouza	Block	Revenue Circle
1	Dibrugarh Municipal Area	Dibrugarh		Dibrugarh East
2	Mohpuwalimora Gohain Gaon (OG)	Jamirah		Dibrugarh West
3	Tekela Chiring Gaon (OG)	Dibrugarh		Dibrugarh East
4	Niz-Mancotta (CT)	Mancotta Khanikar		Dibrugarh West
5	Borbari AMC Area (CT)	Dibrugarh		Dibrugarh East
6	Borbari 12/144 Orr	Dibrugarh	Lahoal	Dibrugarh East
7	BorsaikiaGaon	Dibrugarh	Lahoal	Dibrugarh East
8	Japara Gaon	Dibrugarh	Barbarua	Dibrugarh East
9	Rajabheta 135 F.S.	Dibrugarh	Barbarua	Dibrugarh East
10	Sagunibari Gaon	Dibrugarh	Lahoal	Dibrugarh East
11	Boiragimoth Kachari Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
12	Chiring Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
13	Dhekeri Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
14	Hatimora Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West

15	Komar Gaon	Jamirah	Barbarua	Dibrugarh West
16	Mancotta T.E. 1/159 Rra(A)	Mancotta Khanikar	Barbarua	Dibrugarh West
17	Suta Bogpara 10/165(B)	Mancotta Khanikar	Barbarua	Dibrugarh West
18	TeporGaon	Mancotta Khanikar	Barbarua	Dibrugarh West
19	123/244 No. NLR Grant	Lahowal	Lahoal	Dibrugarh East
20	Agni Pather Gaon	Lahowal	Lahoal	Dibrugarh East
21	Athabari Gaon	Lahowal	Lahoal	Dibrugarh East
22	Bakul T.E. 6 No. LCR	Mancotta Khanikar	Lahoal	Dibrugarh East
23	Bakulbari 26/147 ORR	Lahowal	Lahoal	Dibrugarh East
24	Bakulmaj Gaon	Lahowal	Lahoal	Dibrugarh East
25	Bashbari Gaon	Lahowal	Lahoal	Dibrugarh East
26	Bebejia Gaon	Lahowal	Lahoal	Dibrugarh East
27	Behia Chetia Gaon	Dibrugarh	Barbarua	Dibrugarh East
28	Bhimpara	Modarkhat	Lahoal	Dibrugarh East
29	Bongal Gaon	Dibrugarh	Lahoal	Dibrugarh East
30	Chaulkhowa Grant Gaon	Dibrugarh	Lahoal	Dibrugarh East
31	Chenglijan	Modarkhat	Lahoal	Dibrugarh East
32	Dangar Pothar No.1	Modarkhat	Lahoal	Dibrugarh East
33	Dangar Pothar No.2	Modarkhat	Lahoal	Dibrugarh East
34	Dibrual Changmai	Jamirah	Lahoal	Dibrugarh East
35	Filnuguri Grant 4/152	Lahowal	Lahoal	Dibrugarh East
36	Garuchur Gaon	Lahowal	Lahoal	Dibrugarh East
37	Ghagrajan	Modarkhat	Lahoal	Dibrugarh East
38	Habi Chuk	Modarkhat	Lahoal	Dibrugarh East
39	Harabari Grant 115 F/S	Lahowal	Lahoal	Dibrugarh East
40	Harabari Konwar Gaon	Lahowal	Lahoal	Dibrugarh East
41	Hiloidhari Chandoi Gaon	Lahowal	Lahoal	Dibrugarh East
42	Japisajia Gaon	Lahowal	Lahoal	Dibrugarh East
43	Jilliguri Gaon	Modarkhat	Lahoal	Dibrugarh East
44	Jokai T.E. Co. 29/143 Orr	Mancotta Khanikar	Lahoal	Dibrugarh East
45	Kandulibari Grant 4	Lahowal	Lahoal	Dibrugarh East
46	Lahoal 19/150 Orr (27 No.LC)	Lahowal	Lahoal	Dibrugarh East
47	Lahoal Patra	Lahowal	Lahoal	Dibrugarh East
48	Lahoal T.E. 27/148 Orr	Lahowal	Lahoal	Dibrugarh East
49	Maijan Grant Gaon	Dibrugarh	Lahoal	Dibrugarh East
50	Meleingal Gaon	Modarkhat	Lahoal	Dibrugarh East
51	Miripathar 16 No. FS	Lahowal	Lahoal	Dibrugarh East
52	Miripathar Gaon	Lahowal	Lahoal	Dibrugarh East
53	Mohanbari 31/160 Orr	Lahowal	Lahoal	Dibrugarh East
54	Mohanbari Hindu Gaon	Lahowal	Lahoal	Dibrugarh East
55	Nagaghuli 16/177 Orr	Lahowal	Lahoal	Dibrugarh East
56	Na-Gaon	Modarkhat	Lahoal	Dibrugarh East
57	NizMoidomia	Lahowal	Lahoal	Dibrugarh East
58	HEREN STOLES OF STOLES	Lahowal	17 Ph 5-761	
98	Niz-Lahoal	Lahowal	Lahoal	Dibrugarh East

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59	Nunpuria	Mancotta Khanikar	Lahoal	Dibrugarh East
60	Phutahula	Modarkhat	Lahoal	Dibrugarh East
61	Rajgarh No.2	Modarkhat	Lahoal	Dibrugarh East
62	Romai Gaon	Modarkhat	Lahoal	Dibrugarh East
63	Rongliting No.2	Modarkhat	Lahoal	Dibrugarh East
64	Rongpuria	Modarkhat	Lahoal	Dibrugarh East
65	Sagalikata	Modarkhat	Lahoal	Dibrugarh East
66	Tamulbari T.E.	Modarkhat	Lahoal	Dibrugarh East
67	Tamulbari T.E. 40/43 Nlr	Modarkhat	Lahoal	Dibrugarh East
68	Tamulbari T.E. 43/46 Nlr	Modarkhat	Lahoal	Dibrugarh East
69	Tamulbari T.E. 90/93 Nlr	Modarkhat	Lahoal	Dibrugarh East
70	Timona Gaon	Mancotta Khanikar	Lahoal	Dibrugarh East
71	Titadimaru Gaon	Lahowal	Lahoal	Dibrugarh East
72	53 No. FC Grant	Laruwa	Barbarua	Dibrugarh West
73	Bagibill Gaon	Jamirah	Barbarua	Dibrugarh West
74	Behaiting T.E.	Jamirah	Barbarua	Dibrugarh West
75	Bhogamur Gaon	Laruwa	Barbarua	Dibrugarh West
76	Bhorburi Nogaon No.1	Mancotta Khanikar	Barbarua	Dibrugarh West
77	Bhorburi Nogaon No.2	Mancotta Khanikar	Barbarua	Dibrugarh West
78	Bhorburi Nogaon No.3	Mancotta Khanikar	Barbarua	Dibrugarh West
79	Binoigutia Gaon	Laruwa	Barbarua	Dibrugarh West
80	Bogpara Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
81	Bolai Gaon	Laruwa	Barbarua	Dibrugarh West
82	Bolai Nogaon	Laruwa	Barbarua	Dibrugarh West
83	Bolai T.E. (A) No.45 Grant	Mancotta Khanikar	Barbarua	Dibrugarh West
84	Bolai T.E. (B) No.45 Grant	Mancotta Khanikar	Barbarua	Dibrugarh West
85	Bolai T.E. 42/137 Rr Grant	Mancotta Khanikar	Barbarua	Dibrugarh West
86	Bolaibari Gaon	Laruwa Mancotta	Barbarua	Dibrugarh West
87	Bor Bogpara T.E. 8/185 Orr Grant	Khanikar	Barbarua	Dibrugarh West
88	Bor Temtow Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
89	Borahajer Konwar Gaon	Jamirah	Barbarua	Dibrugarh West
90	Borbarua T.E. 13/76 Orr Grant	Jamirah	Barbarua	Dibrugarh West
91	Borbill Gaon No.2	Jamirah	Barbarua	Dibrugarh West
92	Borpather Kakoti Gaon	Jamirah	Barbarua	Dibrugarh West
93	Borpather Konwar Gaon	Jamirah	Barbarua	Dibrugarh West
94	Burisuti Koiborta Gaon	Laruwa	Barbarua	Dibrugarh West
95	Chamoguri Kachari Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
96	Chamuguri Bongali Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
97	Changamari Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West

98	Changamari Habi	Jamirah	Barbarua	Dibrugarh West
99	Changamari Tekela Gaon	Jamirah	Barbarua	Dibrugarh West
100	Changmai Garia Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
101	Changmai Gohain Gaon	Jamirah	Barbarua	Dibrugarh West
102	Dainijan Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
103	Deori Gaon	Laruwa	Barbarua	Dibrugarh West
104	Dewanbari Bagisha	Laruwa	Barbarua	Dibrugarh West
105	Dewanbari Bagisha 24/149 Nlr Grant	Laruwa	Barbarua	Dibrugarh West
106	Dewanbari Gaon	Laruwa	Barbarua	Dibrugarh West
107	Dhariatoli Gaon	Mancotta Khanikar	Lahoal	Dibrugarh West
108	Dibruwal Dihingia Gaon	Jamirah	Barbarua	Dibrugarh West
109	Digali Dalani Gaon	Laruwa	Barbarua	Dibrugarh West
110	Dighala Gaon	Jamirah	Barbarua	Dibrugarh West
111	Dihing Kaibarta Gaon	Laruwa	Barbarua	Dibrugarh West
112	Dulia Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
113	Dulia Nahorani Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
114	Gabharujan Gaon	Laruwa	Barbarua	Dibrugarh West
115	Garudharia Charaihabi Gaon	Jamirah	Barbarua	Dibrugarh West
116	Gharbondi ChukJarua Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
117	Ghetira Pathar Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
118	Ghoramora Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
119	Ghoronia T.E. 81, 184, 91/94 No. Nlr	Mancotta Khanikar	Barbarua	Dibrugarh West
120	Hanchara Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
121	Hanchara Pathar Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
122	Handique Chuk Gaon	Jamirah	Barbarua	Dibrugarh West
123	HapekhatiGaon	Laruwa	Barbarua	Dibrugarh West
124	HarokPathar Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
125	Hiloibam Gaon	Laruwa	Barbarua	Dibrugarh West
126	Jagalani Grant No. 43 FS	Jamirah	Barbarua	Dibrugarh West
127	Japara Gaon	Jamirah	Barbarua	Dibrugarh West
128	Jokai T.E. No.1 L.C.R.	Mancotta Khanikar	Barbarua	Dibrugarh West
129	Kachari Gaon	Jamira	Barbarua	Dibrugarh West
130	Kachomari Deori Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
131	Kachomari Hatigar Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
132	Kalatomoni Gaon	Laruwa	Barbarua	Dibrugarh West
133	Kamakhya Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West

134	Kapowtepor Gaon	Laruwa	Barbarua	Dibrugarh West
135	Kath Gaon	Mancotta Khanikar	Lahoal	Dibrugarh West
136	Kawoimari Gaon	Laruwa	Barbarua	Dibrugarh West
137	Khanikar T.E. 2 L.C.R. Grant	Mancotta Khanikar	Barbarua	Dibrugarh West
138	Khanikar T.E. 32/31 N.L.R. Grant	Mancotta Khanikar	Barbarua	Dibrugarh West
139	Koliani Nogaon	Mancotta Khanikar	Barbarua	Dibrugarh West
140	Konwar Handique Gaon	Jamirah	Barbarua	Dibrugarh West
141	Konwar Kheroni Gaon	Laruwa	Barbarua	Dibrugarh West
142	Kotoha Bangali Gaon	Laruwa	Barbarua	Dibrugarh West
143	Kotoha Gaon	Laruwa	Barbarua	Dibrugarh West
144	Kuchia Khana Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
145	Lakai Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
146	Laruajan Gaon	Laruwa	Barbarua	Dibrugarh West
147	Lengapathar Gaon	Laruwa	Barbarua	Dibrugarh West
148	Lepetkatta 60 No. FS 71 No. Nlr	Mancotta Khanikar	Barbarua	Dibrugarh West
149	Lepetkatta Bagisha	Mancotta Khanikar	Barbarua	Dibrugarh West
150	Lepetkatta Bangali Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
151	Lepetkatta Bangla Block	Mancotta Khanikar	Barbarua	Dibrugarh West
152	Lepetkatta Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
153	Lepetkatta Kachari Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
154	Mahmari Pather	Jamirah	Barbarua	Dibrugarh West
155	Maju Temtow Bagisha	Mancotta Khanikar	Barbarua	Dibrugarh West
156	Mankata T.E. 1/159 Rr(B) Grant	Mancotta Khanikar	Barbarua	Dibrugarh West
157	MatakGaon	Laruwa	Barbarua	Dibrugarh West
158	Medela Grant No.3	Laruwa	Barbarua	Dibrugarh West
159	Metekani Gaon	Laruwa	Barbarua	Dibrugarh West
160	Mohmari Gaon No.1	Mancotta Khanikar	Barbarua	Dibrugarh West
161	Mohmari Gaon No.2	Mancotta Khanikar	Barbarua	Dibrugarh West
162	Nagakhelia Gaon	Jamirah	Barbarua	Dibrugarh West
163	Nibuk Gaon	Laruwa	Barbarua	Dibrugarh West
164	NijKhanikar Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
165	No.1 Garudharia Gaon	Jamirah	Barbarua	Dibrugarh West
166	No-hazar Konwar Gaon	Jamirah	Barbarua	Dibrugarh West
167	Nowjan Gaon No.1	Laruwa	Barbarua	Dibrugarh West
168	Nowjan Gaon No.2	Laruwa	Barbarua	Dibrugarh West

169	Nowjan Salmari NC	Laruwa	Barbarua	Dibrugarh West
170	Palonia Gaon	Mancotta Khanikar	Lahoal	Dibrugarh West
171	Panitola Konwar Gaon	Mancotta Khanikar	Barbarua	Dibrugarh West
172	Patra Gaon	Jamirah	Barbarua	Dibrugarh West
173	Rawomari Gaon	Jamirah	Barbarua	Dibrugarh West
174	Sessa T.E. 14/153 Orr Grant	Mancotta Khanikar	Barbarua	Dibrugarh West
175	Sessakuch Gaon No.1	Laruwa	Barbarua	Dibrugarh West
176	Sessakuch Gaon No.2	Laruwa	Barbarua	Dibrugarh West
177	Shahjan Gaon No.1	Laruwa	Barbarua	Dibrugarh West
178	Shahjan Gaon No.2	Laruwa	Barbarua	Dibrugarh West
179	Subachuk Gaon	Laruwa	Barbarua	Dibrugarh West
180	Suta Bogpar T.E. 10/165 O.R.(A) Grant	Mancotta Khanikar	Barbarua	Dibrugarh West
181	Tepar Pather Gaon	Laruwa	Barbarua	Dibrugarh West
182	Thangal Gaon	Laruwa	Barbarua	Dibrugarh West
183	Tinchukia Gaon	Laruwa	Barbarua	Dibrugarh West
184	Tingkhong Gaon	Jamirah	Barbarua	Dibrugarh West
185	Walkhabi Gaon No.1	Laruwa	Barbarua	Dibrugarh West
186	Walkhabi Gaon No.2	Laruwa	Barbarua	Dibrugarh West
187	Kollalowa Habi	Mancotta Khanikar	Khowang	Moran
188	Muwamora Gaon No.2	Mancotta Khanikar	Khowang	Moran

DESCRIPTION OF BOUNDARIES

North - River Brahmaputra, Maijan Jan, Grenwood T.E.

South - River Burhi Dihing, Gamon Bridge.

East - Lahowal, Dikom, Tamulbari T.E.

West – Modhupur village, Chawlkhuwa NC village & Jogoloni Grant gaon, Kutuha Nagaon, Baligaon.

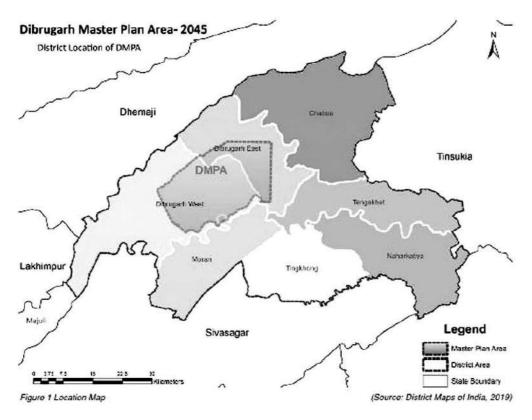
KAVITHA PADMANABHAN,

Commissioner & Secretary to the Government of Assam, Department of Housing and Urban Affairs, Dispur, Guwahati-6.

1 INTRODUCTION TO MASTER PLAN AREA

1.1 REGIONAL SETTING





1.1.1 ASSAM - AS A STATE

Assam is the second largest state among the seven sister states of North-Eastern Region of India. The other six states are (i) Arunachal Pradesh, (ii) Manipur (iii) Meghalaya, (iv) Mizoram, (v) Nagaland and (vi) Tripura. With a geographical area of about 78, 438 sq. kms, Assam accounts for one-third of the area of the North-Eastern region and 2.4 percent of the area of the country. The State has varied landforms, diverse flora and fauna and unique cultural traditions. Assam has a generally humid climate with a pleasant and long winter and brief summer. Temperatures vary from 18° C to 35° C in summer and from 7° C to 26° C in winter. Rainfall is heavy during the monsoon season from June to September and the average heavy rainfall is around 27 cm. (Source: India Meteorological Department).

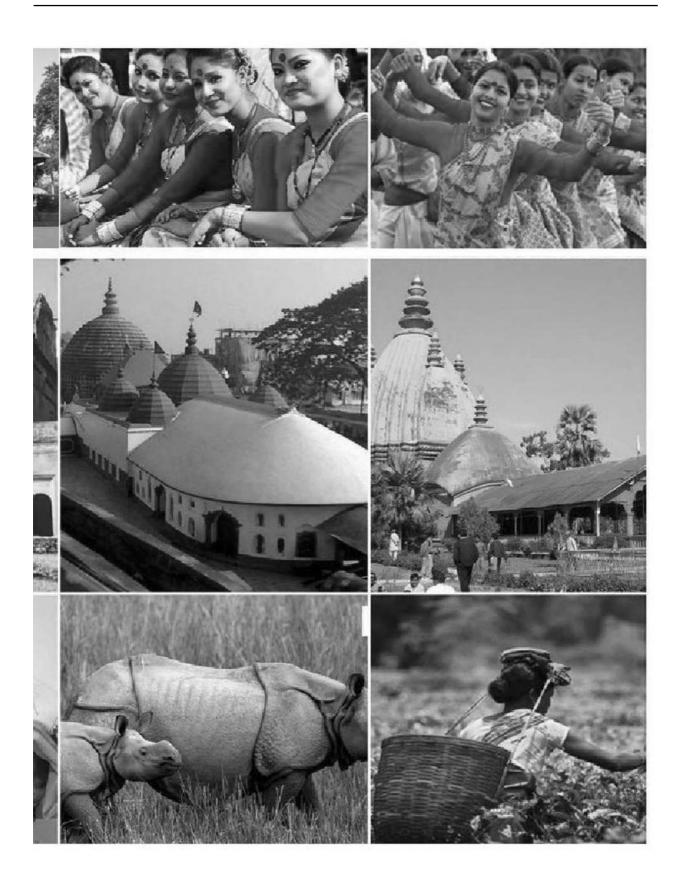
The best tourist season is October to April covering both winter and spring. The economy of Assam is largely dependent on the rivers Brahmaputra and Barak along with their tributaries. The river Brahmaputra, which is the largest river in India, flows through the entire length of the State. Both the rivers, while nourishing the state and aids its economic development, also cause much havoc during monsoons. The hills running east to west divide Assam into two distinct valleys – Brahmaputra and Barak Valleys. The Barail Mountain ranges as well as Rengma and Karbi hills lie between the valleys.

Assam is a State of breath-taking scenic beauty. Its rolling hills, dense forests, green valleys, large waterways and rich biodiversity make Assam one of the splendid tourist destinations in the world. The State is also having unique art and culture, fairs and festivals, temples and monuments and handicrafts and handlooms. Forests cover almost onefourth of the geographical area of the state. These forests, apart from being the home of a variety of animal and plant species and active biospheres, also provide excellent opportunities for nature tourism, wildlife and bird watching, jungle safaris and trekking. Assam has the rare distinction of possessing world natural heritage sites and beautiful national parks, tiger reserves and wildlife sanctuaries. There are five national parks and eleven wildlife sanctuaries in the state. Assam is a natural conglomeration of various ethnic tribes and groups, each having a distinct language, culture, songs, dances, and festivals. Rangoli Bihu festival, tea tourism festival, Brahmaputra beach festival, etc. Are being organized in the state as tourism events.









1.1.2 DIBRUGARH DISTRICT

The Dibrugarh district is located at the eastern part of Assam and north eastern corner of Upper Brahmaputra Valley extends from 27°05'38" N to 27°42'30" N latitude and 94°33'46" E to 95°29'8" E longitude, covering an area of 3381 sq km. Dibrugarh name is formed from the combination of two words "Dibru" and "Garh", which together means the fort (garh) on the bank of river Dibru. The Ahom's had constructed a Garh (Fort) in the mouth of river Dibaru to prevent the soldiers of Chutia king and it was known as a Dibrumukhar Garh. Dibrugarh and adjoining areas offer its tourists a unique blend of tourist attractions ranging from the ecstasies of the tea estates and their heritage to wildlife and culture, also touching the heart of someone with a religious fervour, like Jagannath Temple, Jokai Botanical Garden cum Germplasm Centre.

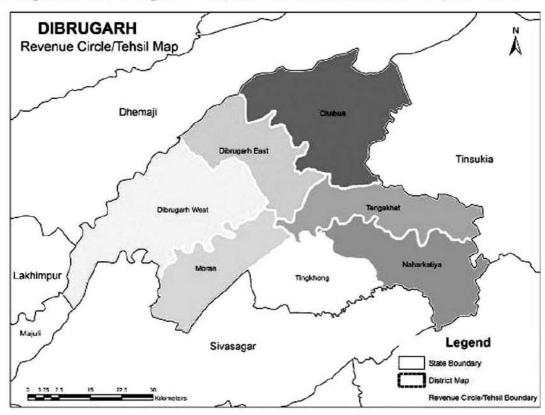


Figure 2 Dibrugarh District Map Showing Tehsils

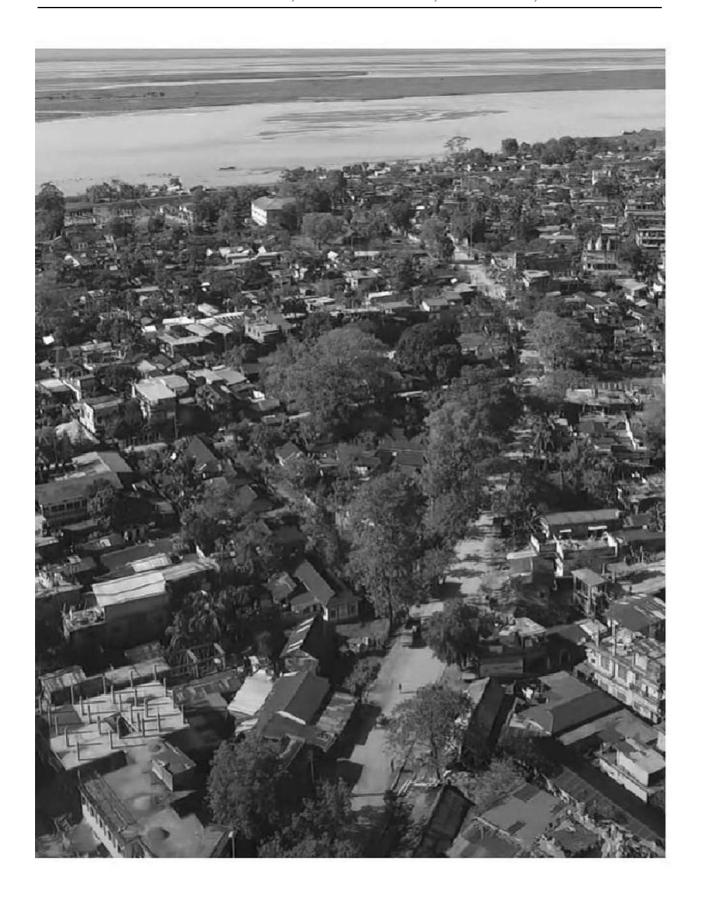
The area stretches from the North Bank of the mighty Brahmaputra, which flows a length of 95km through the northern margin of the district, to the Patkai foothills on the South. The Burhi Dihing, a major tributary of the Brahmaputra with its network of tributaries and wetlands flows through the district from east to west. Till the great earthquake of 1950, the north easternmost corner was drained by the Dibru River. The Dibru was a main tributary of the Brahmaputra the confluence of it being at about 18km east of Dibrugarh City. By raising the bed of the Brahmaputra, the earthquake caused severe erosion on its south bank and as a result the Dibru river got merged with its master stream in Rahmaria mouza.

The District was created on October 2^{nd} , 1971 through bifurcation of district of Lakhimpur. It has boundaries as follows,

North: Dhemaji District and part of Lakhimpur District

South: Sivasagar District and Arunachal Pradesh

East: Tinsukia District, West: Part of Majuli, Lakhimpur and Sivasagar District



1.1.3 DIBRUGARH TOWN

Dibrugarh, is a city and is the headquarters of the Dibrugarh district in the state of Assam in India. Well known as the Tea City of India, Dibrugarh is a major city in eastern India in line with Guwahati and Bhubaneswar and is the emerging communication and industrial hub of North East India. Dibrugarh is also known as "Ti Phao" in Ahom Buranji, meaning Place of the Heaven. Dibrugarh, considering Master Plan Area, has the boundaries

as North: Brahmaputra River, Maijan Jan and Greenwood T.E.

South: River Burhi Dihing, Gamon Bridge, East: Lahowal, Dikom, Tamulbari T.E.,

West: Modhpur Reserve Forest, Chawlkhauwa N.C., Jagoloni Grant.

It is the headquarters of the Dibrugarh district in the state of Assam in India and considered to be a major city in eastern India in line with Guwahati and is the emerging communication and industrial hub of North East India. Dibrugarh is also one of the two main cities in the state of Assam to receive urban development aid from the Asian Development Bank and is the nerve centre of industry, communication and healthcare of the upper Assam region. Dibrugarh is located 439 km (273 miles) east of Guwahati, the largest city of the Indian state of Assam. Dibrugarh is well connected to the rest of India by rail, road and air transport and thus serves as a gateway to eastern Assam and also parts of Arunachal Pradesh. Moreover, there has also been a consistent demand, particularly from the industrial sectors, for starting international flights from Dibrugarh to Bangkok and Singapore. Mega projects like Brahmaputra Cracker and Polymer Limited, India's longest rail cum road bridge Bogibeel bridge and other upcoming modern urban infrastructure are transforming Dibrugarh into a vibrant city. Of late, the city of Dibrugarh is emerging as a popular destination for business and leisure trips for tourists from India and abroad and the 9th edition of the North East Business Summit was held in the city with the theme 'Building bridges with South East Asia', where representatives from South East Asian nations and business leaders of the country pledged to contribute substantially for the socio-economic growth of the North East. Dibrugarh is also a centre of education and research and the Indian Space Research Organisation (ISRO) organized the 18th National Space Science Symposium in the city in January-February, 2014. The existing Master Plan area of Dibrugarh is 71.83 sq. km. and population is 186,214. Now, GIS Based Dibrugarh Master Plan 2045 under AMRUT has total area of 391 sq.km.

It lies between North Latitudes 27° 06° 00° and 27° 58° 18° and East longitudes 94° 39° 00° and 95° 30° 00° . The Dibrugarh Municipality Board covers an area of 15.5 sq. km. Total 22 municipal wards are constituted to service the entire Dibrugarh town area.

Dibrugarh district considered as an economic hub of North East region of India. It is at the centre of economic activities dominated by the following industries: (a) Oil and natural gas (b) Tea production (c) Tourism (d) Power generation (e) Fertilizer (f) Cottage industry.

Burhidihing, a tributary of Brahmaputra, divides the district from east-to-west. Burhidihing flows through Naharkatia and Khowang, and at a later stage in its course, Burhidihing acts as a divider between Dibrugarh and Sivasagar districts. The region is flat with a gradual slope from the East Arunachal hills to the west. The soil of the district is mostly fertile, alluvial soil.

Dibrugarh is the gateway to the three tea-producing districts of Tinsukia, Dibrugarh, and Sivasagar. These three areas account for approximately 50% of India's Assam tea crop, and this gives Dibrugarh its rightly earned sobriquet as the "Tea City of India". Oil and timber are the other two big industries in and around Dibrugarh.

In 1950, the Great Earthquake of Assam, measuring over 8.6 on the Richter Scale, changed the course of the Brahmaputra River, and this caused the destruction of more than three-quarters of the town. It has since then been rebuilt, though the River is a constant reminder to the people who live in its shadow, of its turbulence and all-encompassing journey to the sea.

DIBRUGARH Connectivity Map NH 515 Dhemaji Dhemaji Dhemaji NH 37 Moranhat NH 37 Moranhat

Sivasagar

1.1.4 CONNECTIVITY

Figure 3 Dibrugarh Connectivity map with other regions

1.1.4.1 by Air

akhimpu

Legend

National Highway State Highway

Master Plan Boundary District Boundary

Major Roads Railway

State Boundary

Mohanbari Airport is located at a distance of about 16 km from Dibrugarh town, which serves the Upper Assam districts of Dibrugarh, Tinsukia, Sivasagar and Arunachal Pradesh and is linked with Guwahati, Kolkata, and Delhi. Airlines operating from the airport are Airlndia, IndiGo and SpiceJet. IndiGo Airlines connects Dibrugarh daily with Delhi via Kolkata and another non-stop to Delhi while in return via Guwahati. Commercial operation of aerobridges has also started in this airport. The Air force field at Chabua (Nadua) is at about 25 km from Dibrugarh town.

NH 702

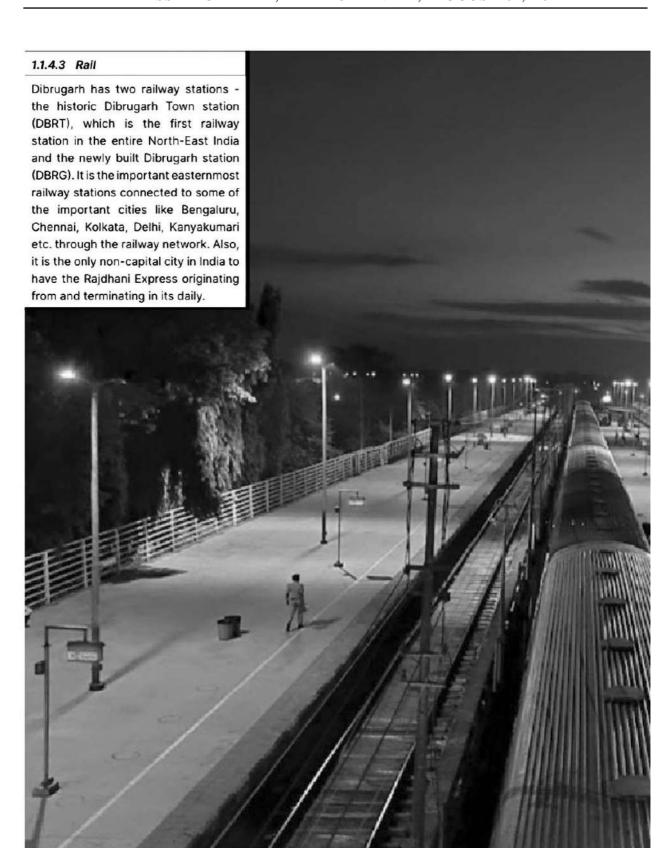
Nagaland

02.25.5 9 13.5 18

1.1.4.2 by Road

Dibrugarh is well connected to North Eastern major cities like Guwahati (438 kms), Jorhat (140 kms), Tinsukia (50 kms), Sibsagar (80 kms), Majuli (160kms) through National Highways - NH 37, NH 52B, Dibrugarh Bypass (NH) and State Highway 23.





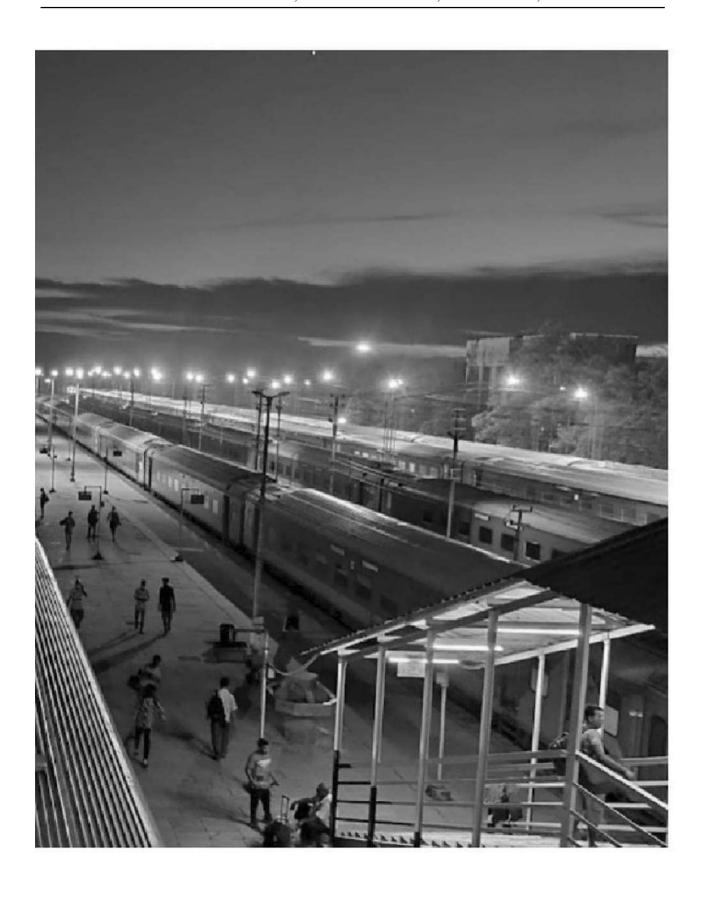




Figure 4 Bogibeel combine road and rail bridge on Brahmaputra river

Newly constructed Bogibeel bridge is a combined road and rail bridge over the Brahmaputra River in the northeastern Indian state of Assam between Dhemaji district and Dibrugarh district. Bridge will enable the military to speedily dispatch forces to neighbouring Arunachal, which borders China. This has cut the rail journey between Dibrugarh and Arunachal by 750 km. The bridge can bear the weight of India's heaviest battle tanks and also allow fighter jets to land.

1.1.4.4 by Waterway

Dibrugarh also possesses a developed waterway transportation system along and across the Brahmaputra River, known as the National Waterway 2 which extends from Bangladesh Border to Sadiya. Majuli is connected through both roadways and waterways.



1.2 CONSTITUENTS OF PLANNING AREA

Dibrugarh as a district having total area of 3381 sq.km. where total population count is 13,26,335. The delineated GIS based Dibrugarh Master Plan area is a part of Dibrugarh District.

Table 1 Administrative Divisions of Dibrugarh District

SI.No.	Administrative Division of Dibrugarh District	Type Number
1	Sub-Divisions	1
2	Revenue Circle	7
3	Legislative Assembly Constituencies	7
4	No. of Development Block	7
5	No. of Municipal Boards	4
6	No. of Census Towns	5
7	No. of Gram Panchayat	93
8	No. of Villages	1362
9	No. of Inhabited Villages	1306
10	No. of Forest Villages	27
11	National Highways Passing through the district	N.H 37,52 B & SH 23

(Source: Dibrugarh District Portal)

In the lower-house of the Indian Parliament, Dibrugarh is one constituency and represented by one elected Member of the Parliament. The Towns of the District are Dibrugarh, Chabua, Naharkatia, Duliajan and Namrup. Revenue Circles: Dibrugarh East, Dibrugarh West, Chabua, Tengakhat, Naharkatia, Tingkhong and Moran. There are seven Legislative Assembly constituencies in this district: Moran, Dibrugarh, Lahowal, Duliajan, Tingkhong, Naharkatia, and Chabua. Chabua is in the Lakhimpur Lok Sabha constituency, whilst the other six are in the Dibrugarh.

1.2.1 AREA INCLUSION IN DIBRUGARH MP 2045

The GIS Based Master Plan area consist villages of 3 revenue circles namely Dibrugarh East, Dibrugarh West and Moran. It consists villages of 3 Blocks namely Lahoal, Barbarua and Khowang. The Dibrugarh town includes 22 Wards, 2 Out Growths and 2 Census Towns which are coming under Dibrugarh East revenue circle. Hence, the total Master Plan area covers these Dibrugarh MB area, 2 Census Towns, 2 Out Growths, 13 Semi urbanize villages, 53 villages from Dibrugarh East, 115 villages from Dibrugarh West and 2 villages from Moran. The delineated area has 4 boundaries. River Brahmaputra on North, River Burhi Dihing on South, Dikom, Tamulbari T.E. on East and Modhupur Reserve Forest on West.

Table 2 Municipal Board/ Out-Growth/ Census Town and Revenue Circle

SI.No.	Name of ULB/ Out Growth/ Census Town	Revenue Circle
1	Dibrugarh Municipal Board	Dibrugarh East
2	Mohpuwalimora Gohain Gaon (OG)	Dibrugarh West
3	Tekela Chiring Gaon (OG)	Dibrugarh East
4	Niz-Mancotta (CT)	Dibrugarh West
5	Barabari AMC Area (CT)	Dibrugarh East

(Source: Compiled by Consultant)

1.2.2 MUNICIPAL WARDS

Table 3 Municipal Ward Area year wise

Ward No.		Area (Sq.Km.)	
ward No.	1991	2001	2011
1	1.03	1.03	1.03
2	1.63	1.63	1.63
3	1.41	1.41	1.41
4	1.44	1.44	1.44
5	1.82	1.82	1.82
6	1.03	1.03	1.03
7	0.64	0.64	0.64
8	0.49	0.49	0.49
9	0.42	0.42	0.42
10	0.18	0.18	0.18
11	0.13	0.13	0.13
12	0.29	0.29	0.29
13	0.24	0.24	0.24
14	0.4	0.4	0.4
15	0.48	0.48	0.48
16	0.57	0.57	0.57
17	0.29	0.29	0.29
18	0.73	0.73	0.73
19	0.46	0.46	0.46
20	0.24	0.24	0.24
21	0.54	0.54	0.54
22	1.04	1.04	1.04
Total	15.50	15.50	15.50

(Source: Compiled by Consultant)

1.2.3 VILLAGES UNDER DIBRUGARH MPA

Table 4 Semi-Urbanized villages and its Revenue Circle

	Semi-Urbanised Villages					
SI. No.	Village Name	Revenue Circle	Block			
1	Borbari 12/144 Orr	Dibrugarh East	Lahoal			
2	Borsaikia Gaon	Dibrugarh East	Lahoal			
3	Japara Gaon	Dibrugarh East	Barbarua			
4	Rajabheta 135 F.S.	Dibrugarh East	Barbarua			
5	Sagunibari Gaon	Dibrugarh East	Lahoal			
6	Boiragimoth Kachari Gaon	Dibrugarh West	Barbarua			
7	Chiring Gaon	Dibrugarh West	Barbarua			
8	Dhekeri Gaon	Dibrugarh West	Barbarua			
9	Hatimora Gaon	Dibrugarh West	Barbarua			
10	Komar Gaon	Dibrugarh West	Barbarua			
11	Mancotta T.E. 1/159 Rra(A)	Dibrugarh West	Barbarua			
12	Suta Bogpara 10/165(B)	Dibrugarh West	Barbarua			
13	Tepor Gaon	Dibrugarh West	Barbarua			

Table 5 Villages of East Revenue Circle

Villages of Dibrugarh East Revenue Circle							
SI. No.	Village Name	Area (sq. km.)	SI. No.	Village Name	Area (sq km.)		
1	123/244 No. NLR Grant	1.1	28	Lahoal 19/150 Orr (27 No.LC)	2.4		
2	Agni Pather Gaon	2.12	29	Lahoal Patra	2.21		
3	Athabari Gaon	2.56	30	Lahoal T.E. 27/148 Orr	5.63		
4	Bakul T.E. 6 No. LCR	1.12	31	Maijan Grant Gaon	1.47		
5	Bakulbari 26/147 ORR	0.81	32	Meleingal Gaon	1.63		
6	Bakulmaj Gaon	3.1	33	Miripathar 16 No. FS	1.05		
7	Bashbari Gaon	2.32	34	Miripathar Gaon	1.88		
8	Bebejia Gaon	2.21	35	Mohanbari 31/160 Orr	1.69		
9	Behia Chetia Gaon	0.84	36	Mohanbari Hindu Gaon	1.24		
10	Bhimpara	0.66	37	Nagaghuli 16/177 Orr	2.18		
11	Bongal Gaon	1.39	38	Na-Gaon	1.51		
12	Chaulkhowa Grant Gaon	3.11	39	Niz Moidomia	2.21		
13	Chenglijan	1.52	40	Niz-Lahoal	3.29		
14	Dangar Pothar No.1	1.69	41	Nunpuria	2.85		
15	Dangar Pothar No.2	0.33	42	Phutahula	2.62		
16	Dibrual Changmai	0.97	43	Rajgarh No.2	0.5		
17	Filnuguri Grant 4/152	1.8	44	Romal Gaon	1.1		
18	Garuchur Gaon	0.25	45	Rongliting No.2	0.46		
19	Ghagrajan	1.16	46	Rongpuria	0.52		
20	HabiChuk	0.24	47	Sagalikata	1.5		
21	Harabari Grant 115 F/S	0.91	48	Tamulbari T.E.	0.81		
22	Harabari Konwar Gaon	1.93	49	Tamulbari T.E. 40/43 Nir	1.13		
23	Hiloidhari Chandoi Gaon	2.92	50	Tamulbari T.E. 43/46 NIr	0.71		
24	Japi sajia Gaon	1.68	51	Tamulbari T.E. 90/93 NIr	1.01		
25	Jilliguri Gaon	1.9	52	Timona Gaon	2.07		
26	Jokai T.E. Co. 29/143 Orr	1.9	53	Titadimaru Gaon	2.87		
27	Kandulibari Grant 4	2.29		TOTAL AREA	89.3		

(Source: Compiled by Consultant)

Table 6 Villages of West Revenue Circle

Villages of Dibrugarh West Revenue Circle						
SI. No.	Village Name	Area (sq.km.)	SI. No.	Village Name	Area (sq.km.)	
1	53 No. FC Grant	0.41	59	Kachomari Deori Gaon	1.07	
2	Bagibill Gaon	2.62	60	Kachomari Hatigar Gaon	0.58	
3	Behaiting T.E.	2.21	61	Kalatomoni Gaon	3.53	
4	Bhogamur Gaon	2.54	62	Kamakhya Gaon	2.85	
5	Bhorburi Nogaon No.1	4.6	63	Kapowtepor Gaon	2.83	
6	Bhorburi Nogaon No.2	1.5	64	Kath Gaon	2.29	
7	Bhorburi Nogaon No.3	1.99	65	Kawoimari Gaon	0.34	
8	Binoigutia Gaon	4.87	66	Khanikar T.E. 2 L.C.R. Grant	2.73	

9	Bogpara Gaon	2.43	67	Khanikar T.E. 32/31 N.L.R. Grant	1.25
10	Bolai Gaon	2.75	68	Koliani Nogaon	1.48
11	Bolai Nogaon	1.04	69	Konwar Handique Gaon	2.14
12	Bolai T.E. (A) No.45 Grant	4.13	70	Konwar Kheroni Gaon	0.59
13	Bolai T.E. (B) No.45 Grant	3.37	71	Kotoha Bangali Gaon	2.04
14	Bolai T.E. 42/137 Rr Grant	1.02	72	Kotoha Gaon	2.15
15	Bolaibari Gaon	1.66	73	Kuchia Khana Gaon	2.13
16	Bor Bogpara T.E. 8/185 Orr Grant	2.63	74	Lakai Gaon	2.91
17	Bor Temtow Gaon	1.6	75	Laruajan Gaon	1.23
18	Borahajer Konwar Gaon	1.84	76	Lengapathar Gaon	1.15
19	Borbarua T.E. 13/76 Orr Grant	2.01	77	Lepetkatta 60 No. FS 71 No. NIr	0.73
20	Borbill Gaon No.2	1.13	78	Lepetkatta Bagisha	0.63
21	Borpather Kakoti Gaon	2.6	79	Lepetkatta Bangali Gaon	2.67
22	Borpather Konwar Gaon	3.49	80	Lepetkatta Bangla Block	0.54
23	Burisuti Koiborta Gaon	0.35	81	Lepetkatta Gaon	2.91
24	Chamoguri Kachari Gaon	1.55	82	Lepetkatta Kachari Gaon	3.28
25	Chamuguri Bongali Gaon	1.14	83	Mahmari Pather	1.68
26	Changamari Gaon	1.8	84	Maju Temtow Bagisha	2.2
27	Changamari Habi	2.33	85	Mankata T.E. 1/159 Rr(B) Grant	2.83
28	Changamari Tekela Gaon	2.19	86	Matak Gaon	1.79
29	Changmai Garia Gaon	2.45	87	Medela Grant No.3	4.31
30	Changmai Gohain Gaon	2.04	88	Metekani Gaon	0.93
31	Dainijan Gaon	1.77	89	Mohmari Gaon No.1	2.33
32	Deori Gaon	3.5	90		
33	Dewanbari Bagisha	Control Contro		0.89	
34	Dewanbari Bagisha 24/149 Nir Grant	1.09	92	Nibuk Gaon	1.72
35	Dewanbari Gaon	0.73	93	Nij Khanikar Gaon	1.67
36	Dhariatoli Gaon	0.48	94	No.1 Garudharia Gaon	0.64
37	Dibruwal Dihingia Gaon	2.26	95	No-hazar Konwar Gaon	1.86
38	Digali Dalani Gaon	3.52	96	Nowjan Gaon No.1	2.14
39	Dighala Gaon	2.64	97	Nowjan Gaon No.2	0.43
40	Dihing Kaibarta Gaon	0.21	98	Nowjan Salmari NC	0.81
41	Dulla Gaon	1.87	99	Palonia Gaon	0.79
42	Dulia Mahorani Gaon	1.29	100	Panitola Konwar Gaon	1.85
43	Gabharujan Gaon	1.3	101	Patra Gaon	1.99
44	Garudharia Charaihabi Gaon	0.92	102	Rawomari Gaon	2.79
45	Gharbondi Chuk Jarua Gaon	2.31	103	Sessa T.E. 14/153 Orr Grant	4.41
46	Ghetira Pathar Gaon	1.15	104	Sessakuch Gaon No.1	0.4
47	Ghoramora Gaon	1.52	105	Sessakuch Gaon No.2	0.26
48	Ghoronia T.E. 81, 184, 91/94 No. Nir	2.4	106 Shahjan Gaon No.1		0.61
49	Hanchara Gaon	0.57	107	Shahjan Gaon No.2	1.16
50	Hanchara Pathar Gaon	0.81	108	Subachuk Gaon	2
51	Handique Chuk Gaon	1.91	109	Suta Bogpar T.E. 10/165 O.R.(A) Grant	2,31

52	Hapekhati Gaon	1.88	110	Tepar Pather Gaon	2.24
53	Harok Pathar Gaon	0.78	111	Thangal Gaon	2.96
54	Hiloibam Gaon	0.17	112	Tinchukia Gaon	2.98
55	Jagalani Grant No. 43 FS	4.98	113	Tingkhong Gaon	3.08
56	Japara Gaon	1.83	114	Walkhabi Gaon No.1	1.76
57	Jokai T.E. No.1 L.C.R.	8.17	115	Walkhabi Gaon No.2	2.89
58	Kachari Gaon	1.97	TOTAL AREA		226.14

(Source: Compiled by Consultant)

Table 7 Moran Revenue Circle

	Moran Revenue Circle						
SI.No.	Name of Village	Area (sq.km.)					
1	Kollaloya Habi	0.07					
2	Muwamora Gaon No.2	4.83					
	TOTAL AREA	4.89					

1.2.4 EXISTING MASTER PLAN AREA INCLUSION

Table 8 Existing Master Plan Area

SI.No.	Description	Area (sq.km)
1	Existing Municipal Board Area	15.50
2	Existing Outgrowth / Census Town Area	8.53
3	Existing Rural Area	47.8
	Existing Dibrugarh Master Plan Area	71.83

(Source: NUSI Report of Dibrugarh and Existing Master Plan)

1.2.5 NEW GIS BASED MASTER PLAN AREA - 2045

Table 9 New GIS Based Master Plan Area for 2045

SI. No.	New GIS based Dibrugarh Master Plan Area	Area (Sq.km)
1	Dibrugarh Municipal Board (22 Wards)	15.50
2	2 Outgrowths & 2 Census Towns	8.53
3	13 Semi-Urbanised VIIIages -Dibrugarh East & West Revenue Circle	23.42
4	53 Villages from Dibrugarh East Revenue Circle	89.37
5	115 Villages from Dibrugarh West Revenue Circle	226.21
6	2 Villages from Moran Revenue Circle	4.89
7	Reserved Forest (Jokai)	23.08
	TOTAL GIS Based Master Plan Area	391.00

(Source: Compiled by Consultant)

Table 10 Important Landmarks and its distance from Town

SI.No.	Description	Name	Dist. (km.)
1	State Headquarters	Dispur, Guwahati	443 km
2	District Headquarters	Dibrugarh	Within DMPA
3	Nearest City (having 1 lakh & above Population)	Tinsukia	48 km
	N. A.	DBRT	Within DMB
4	Nearest Railway station	DBRG	Within DMPA
5	Nearest Airport / Air strip	Mohanbari	16 km

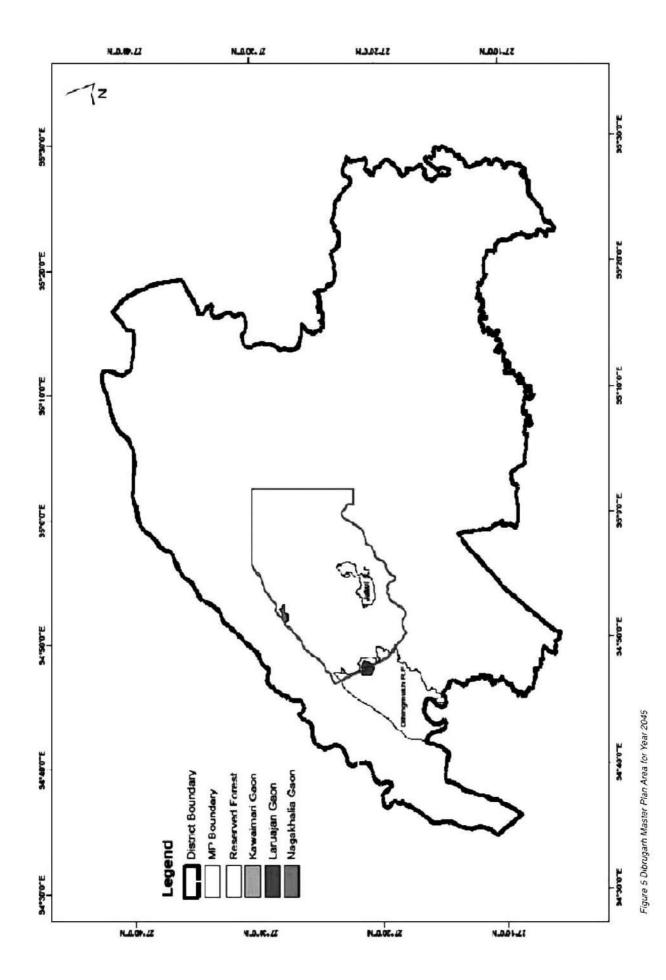
(Source: NUSI Report of Dibrugarh)

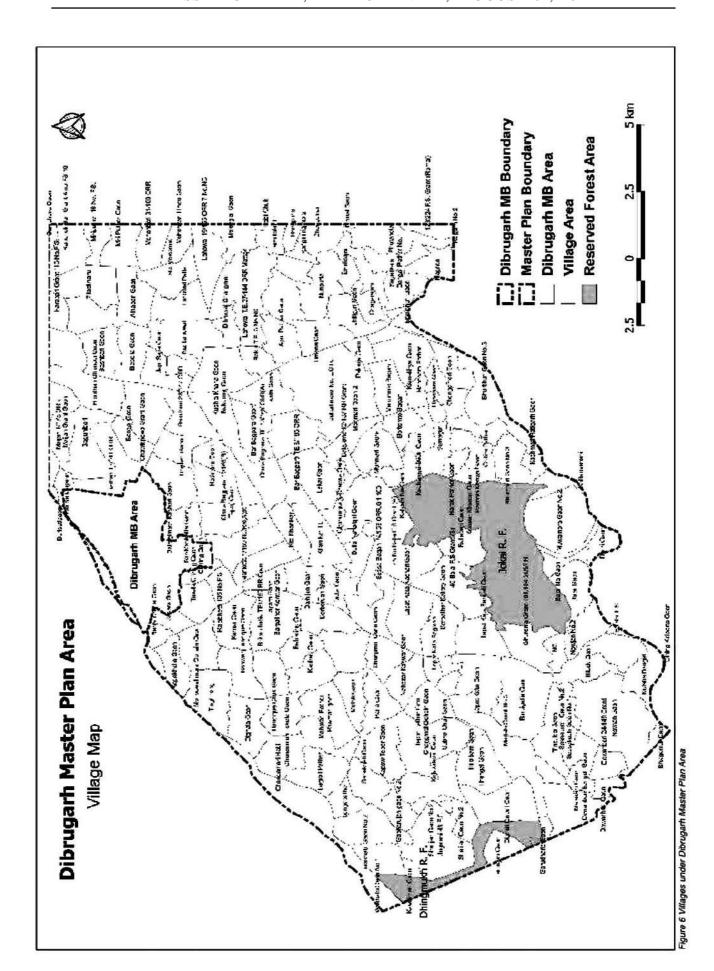
Table 11 Nearness / Distance of Major River / Canal / Coastline from Town

SI.No.	River / Drain Name	Distance (km) from the Town
1	The River Brahmaputra	Northern border of the town
2	The River Buridihing	22.35 km through AT Road
3	The River Sessa	9.03 km through Mancotta Road,18.65 km through AT Road
4	Dibrugarh Town Protection Drain (DTP)	Within the town
5	Rajabheta Drain / Jan	4.13 km
6	2 nd Main Drain	Within the town

(Source: NUSI Report of Dibrugarh GIS based Master Plan of Dibrugarh)





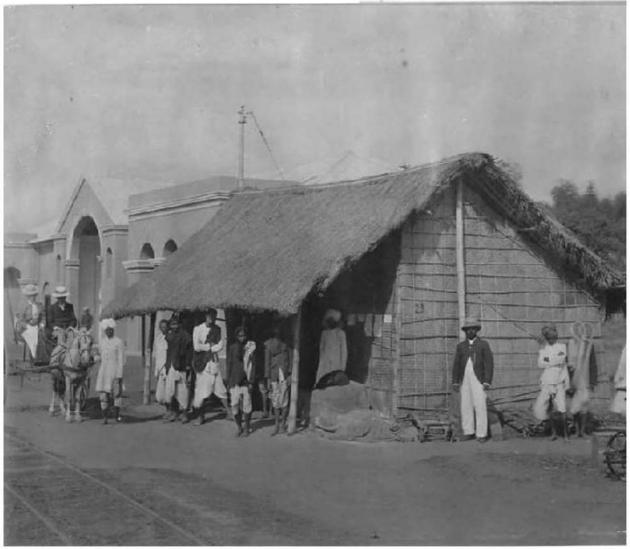


1.3 HISTORY OF THE TOWN

In modern India, urbanization was greatly facilitated by the British government. The East India Company selected sites which had both commercial and strategic importance. Since in the beginning their trade was mainly sea-borne and water transport was main means of conveyance everywhere in the world, they choose those sites which were close to sea. The indigenous government allowed them to have their settlement in the unhabitated and slum areas near the sea.

In Assam, the East India Company looked for sites which should serve both their commercial and strategic purpose. During the days of Ahoms, Rangpur and Garhgaon which were their capitals were more important then Guwahati, the headquarter of Barphukon. In upper Assam, The British gave more importance to Dibrugarh than to the Ahom Capitals at Rangpur or Garhgaon. This was due the reason that Dibrugarh being located near the confluence of the Brahmaputra and Dihing river, commanded a great strategic importance, at a time when the British were yet to be free from Burmese attacks and inroads of the turbulent hill tribes of the frontier.





The name Dibrugarh is a compound of two words 'Dibru' and 'Garh' (fort). The Dibru is the name of a stream which used to flow to the south of the present town of Dibrugarh. When the British established a military base at Dibrugarh they had also constructed a fort on the bank of the river Dibaru. It is said that thenceforth, the place which was earlier called simply 'Dibaru' came to known as 'Dibrugarh'.

The greatest interest of British in Assam was the commerce centering round it. As early as 1823 the British discovered tea in the modern Sadiya region. It was at Chabua, 20 miles to the east of Dibrugarh that the British made their first experiment with tea cultivation with indigenous plants. Till 1826, Dibrugarh was under the Burmese rule. It came under the British rule after the Yandaboo treaty was ratified. Known to be the industrial and commercial hub of Upper Assam, the city was proclaimed as the centre of administrative activity by the Britishers when they arrived here in the year 1826. Very soon oil and coal were discovered in areas near to the Dibrugarh Town. Oil was discovered at Digboi in 1882 and Coal was found at Ledo and Margherita in 1876. All these greatly enhanced the importance of Dibrugarh as a centre of Industrial, commercial and administrative activities.

In the year 1882, first train rolled down the tracks from streamer ghat at Dibrugarh and connected to Margherita by railways. Dibrugarh was made the District headquarter in 1842 of Lakhimpur district which was located in an interior area. Under Bengal Act 1872, a Municipality was set up in 1873. In 1872, it had a population of only 3870 persons.

Dibrugarh built up its intellectual foundation and played an important role in the Country's struggle for freedom. Intellectuals in Dibrugarh played a leading role in arousing the spirit of nationalism in the province of Assam. Journalism which had a significant contribution to this event, was greatly patronized by the intellectuals of Dibrugarh. The first news weekly of the province, The Times of Assam was published from Dibrugarh in 1895.

The first Girl's School of Assam was established here in 1901. The first Medical Institution in the North-East, the Berry White Medical School was established here in 1901 and the second university in the State come to be established in 1965.

Originally being a hub of tea export, a marketplace sprang up in Purana Bazar area (old market). In 1907, the new market was developed as the Purana Bazar area and the Dibru River has been submerged by mighty Brahmaputra. Within a span of 110 years, the population rises from 11,227 (1901) to 1,54,296 (2011, Dibrugarh urban agglomeration).



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Baruah, Dipali: Urban History of India: A Case Study, Mittal Publications, 1994, ISBN 8170995388, 9788170995388

1.3.1 BRIEF HISTORY OF DEVELOPMENT OF TOWN

The chronicles of the development of town is classified into four, namely, ancient Dibrugarh, Pre-independence, During partition and Post-independence is given below in the tabular form:

Table 12 Chronical history of development of town

Year	Details
Ahom Empire (600 years)	 In 1228, invasion of Ahoms. They were advanced in agriculture and farming, therefore at the very beginning, they searched a land for agriculture and moved place to place in the eastern part of the Brahmaputra valley. Introduced the wet-rice cultivation system in Assam. Established reclamation of land using dykes, embankments and irrigation systems. The first coins were introduced. Revenue system was adopted by the Ahom from Koch (present Guwahati) and Mughals. Diminishing: Moamaria rebellion in 1769-99 and the Burmese invasion in 1824-26 periods.
Pre- independence	 In 1826, the British troops drove the Burmese and led to the annexation of Assam. The Britishers selected Dibrugarh as an administrative and commercial center of Upper Assam. Dibrugarh town was established with the construction of a large fort in the banks of the Dibru River, which acted as a trading site for traders coming by boats, thus leading to the establishment of a market known as the Purana bazaar, later eroded away in a massive flood. After that the new market was established in 1907. In 1842, it was the headquarters of Lakhimpur district and served as a primary military base and a transit camp for the evacuees of Burma during the World War II. In 1870, the District Judiciary Court was constructed. Under Bengal Act 1872, a Municipality was set up in 1873. The growing number of tea gardens opened up a number of linking roads to facilitate the transport of tea to the river-port at Dibrugarh. In 1882, the first train rolled down the tracks in Dibrugarh.
During partition	Migration of tea garden, mining and other labour force, also number of skilled and semi-skilled workers, with the inflow of civil and army officers, upcountry traders and merchants had given a heterogeneous population structure.
Past- independence	 The oil industry helped in significant economic development of the region and also rapid urbanization of the area. In 1947, Assam Medical College got established. Dibrugarh to have introduced city bus service in 1956. The Dibrugarh University got set up in 1965. District & Sessions Judge was appointed in Dibrugarh in 1967. In 1971, Lakhimpur district got bifurcated into Dibrugarh and Lakhimpur districts. Dibrugarh district got further bifurcated into Dibrugarh and Tinsukia districts.

1.4 CLIMATE

1.4.1 TEMPERATURE

The area experiences subtropical monsoon climate with mild winter, warm and humid summer. Rainfall decreases from south to north and east to west in the area. The average temperature of 27.9°C and average relative humidity of 95%. The temperature generally decreases from south to north. The average annual temperature in Dibrugarh is 23.9°C. Located on the bank of the Brahmaputra, the Dibrugarh city experiences mild climate with low temperature. Based on the climatic characteristics such as distribution of temperature, rainfall, rainy days, humidity, presence of fogs and thunderstorms, the climate of the area may be classified into four seasons viz. (a) winter, (b) pre-monsoon, (c) monsoon and (d) retreating monsoon. The winter constitutes the months of December, January and February. Fair weather prevails during this time occasionally associated with fogs and haze. December and January are the driest months and January is the coldest. The minimum temperature during this season ranges between 10°C and 12°C and the maximum between 27°C and 29°C. From March the land surface gets steadily heated and the temperature starts rising. Strong convection develops due to the local depressions formed especially in the afternoon. The norwesters locally called Bordoichilla appears during the period. Maximum temperature ranges between 28°C and 32°C. With the onset of monsoon in early June, widespread low clouds and high humidity together maintain almost uniform temperature over the area. The maximum temperature ranges between 33°C and 37°C. This season is, in fact, a transitional phase between the dry cool winter and the warm moist monsoon.

Month	Min.	Max.	Month	Min.	Max.
January	12	24	July	25	32
February	15	27	August	25	32
March	18	30	September	25	34
April	21	32	October	21	30
May	23	31	November	16	30
June	24	33	December	13	28

Table 13 Month wise Min and Max Temperature

(Source: India Meteorological Department)

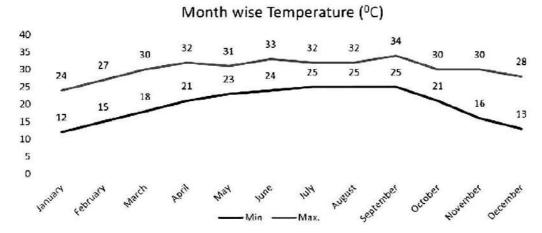


Figure 7 Monthly min and max temperature

1.4.2 RAIN FALL

The average rainfall in the Dibrugarh is 2618 mm with average relative humidity of 95%. The average annual rainfall of the Dibrugarh in the north is 2760 mm with a total number of 193 rainy days. Rainfall records show a decreasing trend towards east and west of Dibrugarh city. The average rainfall is 26 cm. The months of March, April and May constitute the pre-monsoon season. The norwesters locally called Bordoichilla appears during the period. Rainfall ranges between 59 cm and 160 cm. With the onset of monsoon in early June, heavy rainfall occurs. Widespread low clouds and high humidity together maintain almost uniform temperature over the area. The average annual rainfall during the period is 300 cm. The occurrence of thunderstorms is the most conspicuous characteristics of the monsoon weather. This is the season of dominant agricultural operation. The monsoon withdraws from the area in the last week of September or first week of October. The cool north-easterly winds originating over the lofty mountains of the Arunachal Himalayas brings the temperature down. The orographic low is replaced by high pressure and a flat pressure gradient occurs. Rainfall decreases abruptly and the sky becomes progressively clear. Sunny days prevail till the end of November. Month wise normal maximum and minimum temperature is given in Table 14.

Year	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Annual
2006	1.6	158.3	64.5	319.6	285.2	307.2	458.6	270.6	291.5	57.2	26.1	14.2	2254.6
2007	2.3	56.2	17.7	330.3	162	431.5	631.8	258	367.7	98.1	13.8	8.2	2377.6
2008	35.7	17.4	180.1	190.3	254.4	487.4	517.9	441.8	229	82.3	6.8	5.4	2448.5
2009	20.2	34	36.3	196.9	153.4	359.8	416.6	530.9	268.4	134.9	24.1	7.6	2183.1
2010	1.3	9.8	143.1	436.7	334.5	333.7	447.2	397.3	398	90.4	35.4	6.5	2633.9
Rainfall	1.3	7.9	143.1	457.3	304.9	333.7	447.2	410.1	385.2	90.4	30.4	6.5	2618

Table 14 Monthly and Annually Rainfall data

(Source: India Meteorological Department)

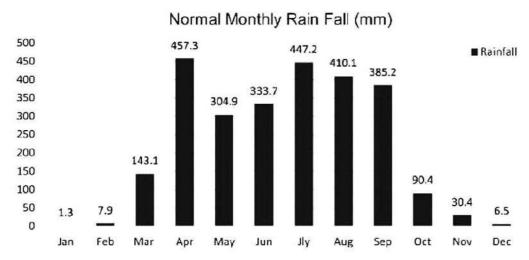


Figure 8 Monthly normal rainfall

1.5 PHYSIOGRAPHY

1.5.1 TOPOGRAPHY

Dibrugarh has been established by extensive plain formed by the Brahmaputra River and its major tributary namely Burhi Dihing and is situated in the north eastern corner of the Upper Brahmaputra valley with an elevation ranging between 99 to 474 meters. Physiographically, the master plan area is a plain area with occasional highlands, flood plain, beels, swamps and foothills of the Barail Range. Burhi-Dihing, a tributary of Brahmaputra, divides the district from east-to-west. Burhi-Dihing flows through Naharkatia and Khowang, and at a later stage in its course, Burhi-Dihing acts as a divider between Dibrugarh and Sibsagar districts. The region is flat with a gradual lope from the East Arunachal hills to the west. The soil of the district is mostly fertile, alluvial soil.

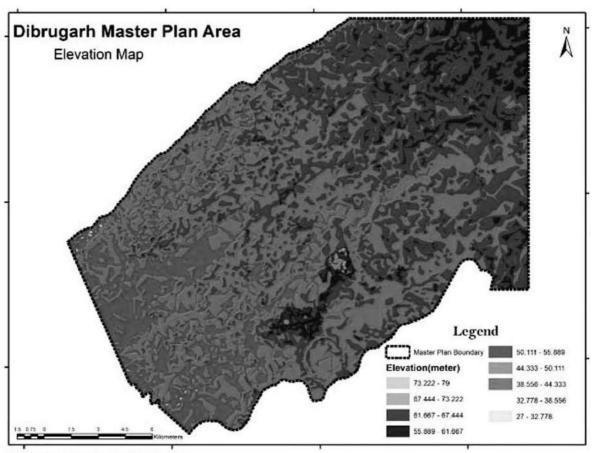


Figure 9 Dibrugarh MPA Digital Elevation Map

The northern boundary of the MPA is bounded by river Brahmaputra which is fairly wide with average width of 10 km. The general gradient of the district is from south-east to north-west. The height decreases gradually from this corner to the mouth of the Burhi Dihing River where the altitude is 55 m. However, the northern belt of the area has a gentle slope from east to west. The altitude of the eastern part is 79 m, while it is 44 m in the western part. Average elevation of the MPA is 40 m and mean east-west slope is 152 cm per km. Because of the relatively high slope and large volume of water, the Brahmaputra flows with a high velocity causing significant bank erosion in the area.

The Digital Elevation Model (DEM) of the district is given in Fig. 9 above.

SI.No.	Elevation(m)	Area (sq.km.)
1	0-27	8.70
2	27-32	16.89
3	32-38	60.64
4	38-44	86.58
5	44-50	73.82
6	50-55	90.93
7	55-61	44.74
8	61-67	13.94
9	67-73	02.89
10	73-79	0.85

Table 15 Area Coverage of classified elevated zone

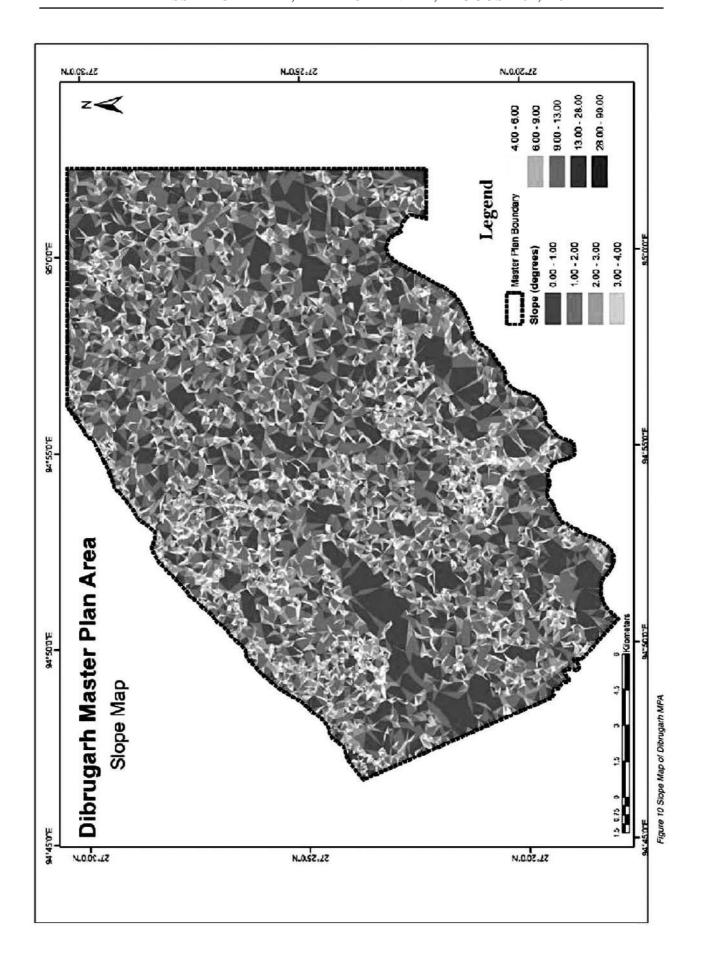
1.5.2 SLOP AND ASPECT

Around 25% of the MPA area is plain i.e. slope varies between 0-1% interspaced with slope of 1-3%. In the southern part towards river Burhi Dihing steeper slopes are prevalent where the slope is as high >28 degree. Maximum degree of slope falls in the bracket of >28 degree, which covers 0.1 sq.km of MPA area and the average slop value of 4 to 6 degree as per digital slope model. Maximum master plan area land cover (i.e 35%), falls under the slop category of 2-3 degree which covers 137.95 sq.km land of Dibrugarh MPA.

	Slop	3			As	pect	
SI. No.	Slop %(degree)	Area (sq.km.)	% of MPA	SI. No.	Direction	Area (sq.km.)	% of MPA
1	0-1	96.58	25	1	Flat	59.53	15
2	1-2	47.78	12	2	N	28.74	7
3	2-3	137.95	35	3	NE	41.18	11
4	3-4	41.58	11	4	E	37.81	10
5	4-6	44.75	11	5	SE	46.13	12
6	6-9	11.60	3	6	S	39.23	10
7	9-13	9.61	3	7	SW	42.91	11
8	13-28	1.02	0	8	w	39.29	10
9	>28	0.10	0	9	NW	46.74	12
	Total	391.00	100	T	otal	391.00	100

Table 16 Area coverage of classified slope and aspect zone

The aspect direction is distributed almost uniformly all across the MPA. Maximum aspect direction falls under flat area that is 59.53 sq.km. i.e.15% of MPA and minimum aspect direction is in North side which is of 28.74 sq.km. i.e. 7% of MPA. The distribution of various slope types and aspect direction of the district is given in Table 16.



1.5.3 DRAINAGE

On the northern margin of the town lies the river Brahmaputra with braided water course drains the whole area. The Dibru is a main tributary of the Brahmaputra the confluence of it being at about 18 km east of Dibrugarh city. Maijan stream, a tributary of the former Dibru has become a tributary to the Brahmaputra.

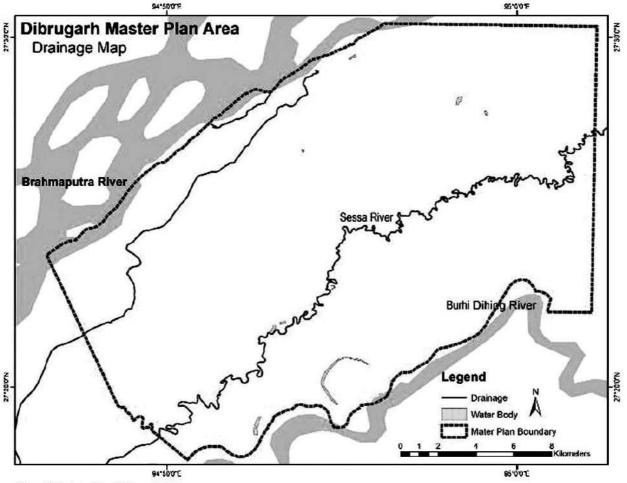
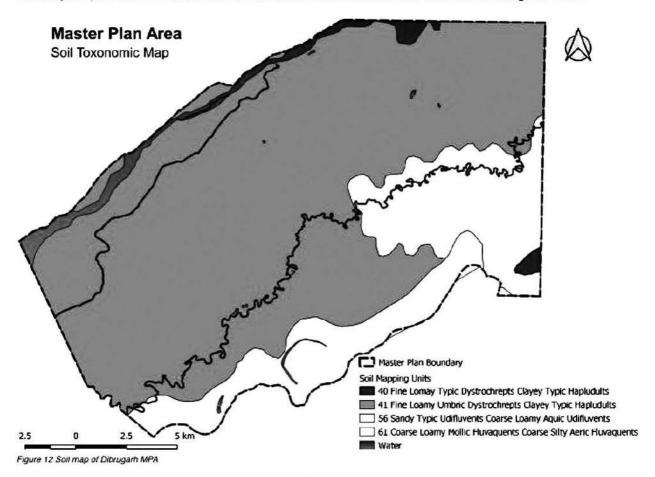


Figure 11 Drainage Map of Dibrugarh MPA

The river Burhi Dihing flows from almost east to west direction across the area. It has many tributaries viz. Tingrai, Tipling, Telpani, Deherang and Sessa in the north bank and Tipam and Disam in the south bank. In addition to the tributaries of the Burhi Dihing, there are three other tributaries of the Disang river namely Gela Disam, Tiolo and Demow flowing mainly from the Tingkhong mouza. Burhi Dihing flows for 90 km through the Patkai hills before it comes down to the foot hill zone. Thereafter it flows in a south-west direction for 20 km before meeting the Khaikhe and Meganton.

1.5.4 SOIL CONDITION

The soils of the area are basically the products of the fluvial processes of the Brahmaputra and its tributaries and composed of sand and clay in varying proportion. The high grounds of this zone composed mostly of lateritic soils and are covered by tea gardens and dense forests. The plains are composed of alluvium which may be classified as new and old. The new alluvium varies mostly from clayey to sandy loam in texture and is slightly acidic in reaction, deficient in phosphoric acid, nitrogen and humus, but rich in lime and potash. The old alluvium on the other hand occurs in the upper and middle parts of the valleys in the form of terrace deposits. These deposits contain alternating beds of pebbles, gravel or boulder with loose sand and clays. In certain parts, both the old and new alluvium are so combined that it is difficult to distinguish them.



The old alluvium has relatively high percentage of acid and soluble magnesium accompanied by calcium in general, its hydrochloric acid soluble material contents are lower and the percentage of MgO is higher. The pH value ranges between 4.2 and 5.5 with very low quantity of exchangeable calcium which varies from 0.1 to 5.0 mg per 100 gm of soil. The new alluvium is less acidic as compared to the old alluvium. Its pH value varies from 5.5 to 9.0. These soils are rich in PO4, K and Ca (6 to 21mg per 100 gms of soil), but its nitrogen content is somewhat low, being 0.1 percent.

The riverbanks bear texturally three types of soil i.e. sandy loam, coarse loam and clayey loam. These favour cultivation of winter rice, mustard, pea, vegetables, etc. Of the total riverbank area, 82.0% is arable, 7.0% is non arable land and 11.0% is not available for cultivation. As per the soil taxonomy classification of NBSS and LUP the soils are classified as association and grouped under 9 soil mapping units. The description of different mapping units along with percent area covered is given ahead.

SI. No.	Soil Classification	Area (Sq.Km)	% of Area
1	41 Fine Loamy Umbric Dystrochrepts Clayey Typic Hapludults	217	55.50
2	56 Sandy Typic Udifluvents Coarse Loamy Aquic Udifluvents	95	24.29
3	61 Coarse Loamy Mollic Fluvaquents Coarse Silty Aeric Fluvaquents	45	11.51
4	Water	33	8.44
5	40 Fine Lomay Typic Dystrochrepts Clayey Typic Hapludults	1	0.39
Total		391	100

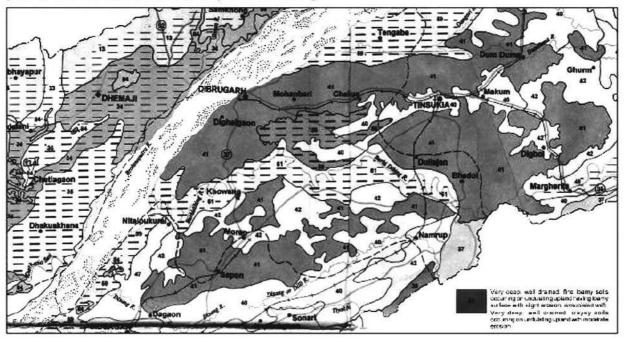
Table 17 Soil type and their area coverage in Dibrugarh MP area

Soil mapping unit 40 (Fine Loamy Typic Dystrochrepts and Clayey Typic Hapludults): Very deep, well drained, fine loamy soils occurring on gently sloping to undulating upland having loamy surface with moderate erosion, associated with very deep, well drained, clayey soils occurring on undulating plain with slight erosion.

Soil mapping unit 41 (Fine Loamy Umbric Dystrochrepts and Clayey Typic Hapludults): Very deep, Well drained, fine loamy soils occurring in undulating uplands having loamy surface with slight erosion, associated with very deep well drained clayey soils occurring on undulating upland with moderate erosion.

Soil mapping unit 56 (Sandy Typic Udifluvents and Coase Loamy Aquic Udifluvents): Deep well drained, sandy soils occurring on level to nearly level active flood plain having loamy surface with moderate erosion and severe flooding associated with very deep well drained coarse loamy soils with severe erosion and severe flooding.

Soil mapping unit 61 (Coarse Loamy Mollic Fluvaquents and Coarse Silty Aeric Fluvaquents): Moderately deep, moderately well drained coarse loamy soils occurring in level to nearly level active flood plain and on stable river islands having sandy surface with ground water table below 1 m of the surface and very severe flooding associated with deep imperfectly drained coarse silty soils occurring on nearly level active flood plain with moderate erosion and very severe flooding



1.5.5 GEOMORPHOLOGY

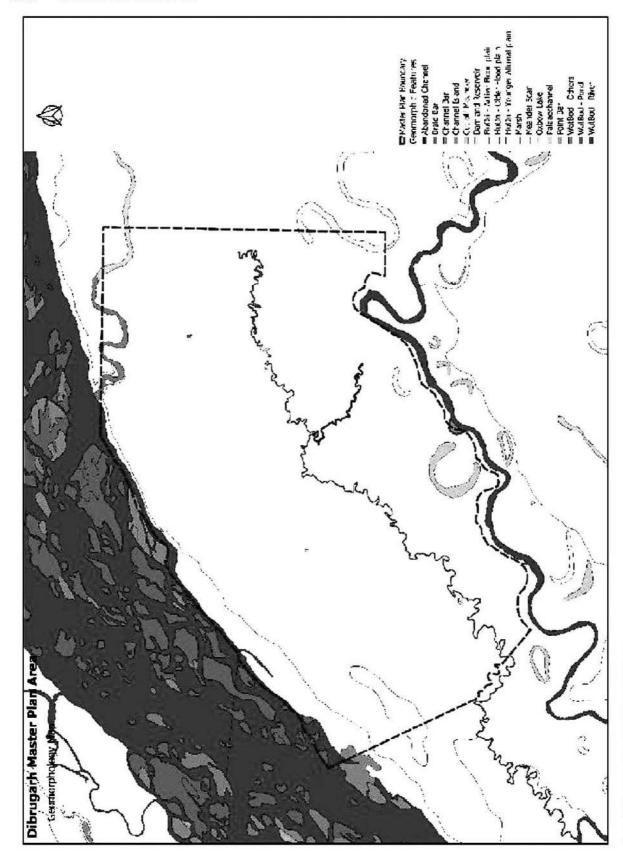
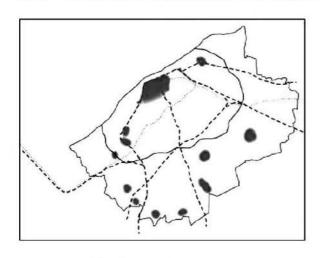
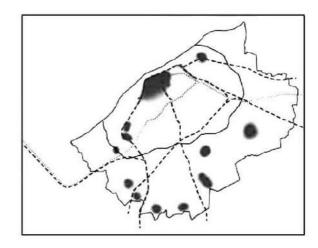


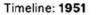
Figure 13 Geomorphology map of Dibrugarh MP area

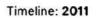
1.6 CITY INFLUENCE & ITS CHARACTERISTICS

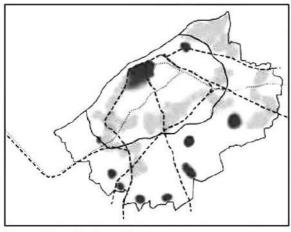
1.6.1 SETTLEMENT PATTERN AND EXPANSION OF TOWN

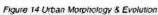












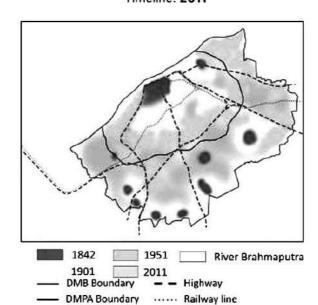


Table 18 History of the physical growth and expansion of Dibrugarh town

Year	City Population	Description
1842	5,000 (approx.)	The areas like Graham bazaar, Naliapool, Amolapatty, Purana bazaar where settlements got developed. It was the headquarters of Lakhimpur district and served as a primary military base and a transit camp for the evacuees of Burma during the World War II. The District Judiciary Court was constructed
1901	14,000 (approx.)	New market area got developed after Purana bazaar got eroded away. Due to tea plantations, oil industry and railways, the area got developed.
1951	37,991	Dibrugarh to have introduced city bus service. Assam Medical collage established Industries got started during this period. Urban area expanded in a very irregular manner.
2011	1,54,296	Engineering and commerce colleges were established. Being an economic and institutional hub, the city expansion was developed; with the opening of airport and new railway station.

1.7 NEED FOR THE MASTER PLAN

A town/city and its surrounding areas are composed of land, buildings, people, utilities and transportation and communication facilities, drainage, markets etc. A Master Plan is a statutory instrument for controlling, directing and promoting the sound and rational development or redevelopment of an urban area and its adjoin areas within a view to achieving maximum economic, social and aesthetic benefits.

The Master plan is a long-term perspective plan intended to guide the growth and development of a city or a region. It is a document that describes, in narrative and with maps, an overall development concept including both present uses as well as future land development plans. The Master plan provides allocation of land in view of the space requirements coming up in future years. It also sets out strategies and measures to be adopted for the facilitation of commercial, industrial, residential, tourism-related, recreational and other investments and provide for the development of urban infrastructure of the desired standards for improved quality of life.

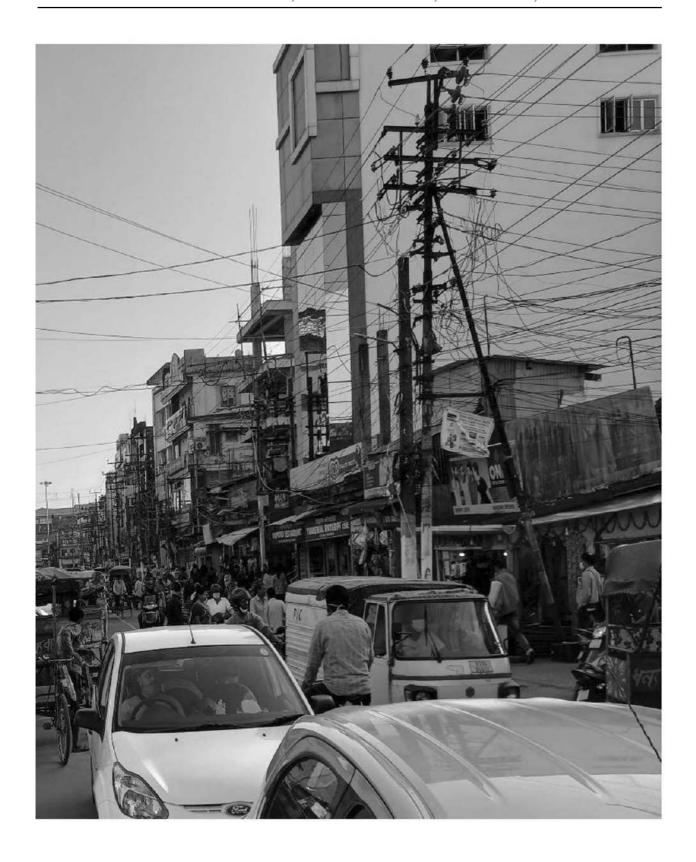
The Master Plan consists of co-ordinated plans of major streets, transportation facilities, parks, recreation facilities, educational facilities, health facilities, tourist facilities, public utilities, physical infrastructure, commercial and industrial areas – all arranged in such a way which would function most efficiently and economically and also enhance the aesthetic beauty not only of the urban area but also the village area at the same time. It is also an important tool for guiding and regulating the future growth of the town.

The Master Plan provides vision, direction and a defined achievable future for the Town by establishing specific goals and strategies for land use; community appearance and design; housing and neighbourhoods; jobs and economic vitality; transportation; public services and facilities; natural resource protection; open space and recreation; history, arts and culture; and regional coordination. It is also the basis for taking day to day decisions on land use conversion that follow an optimistic and hopeful long-term vision.

A Master Plan is needed for the proper physical development of a city. It is needed to guide how we may use space and manage competing demands of space in future thereby ensuring a better Guwahati for tomorrow. It may be noted that it was agreed in a Workshop held at the National Level in 1995 sponsored by the Ministry of Urban Development, Government of India that the alternative to a Master Plan is a "better Master Plan."

The preparation of Master Plan is a continuous process and needs revision/ modification from time to time to incorporate the unforeseen development, technical innovations etc. The first Master Plan of Dibrugarh was prepared long back in the year 1977 and revised it in the year 2007 and will be valid up to the year 2021. As such it is necessary to revise the Dibrugarh Master Plan by adopting new GIS based technology under the scheme of AMRUT (Atal Mission for Rejuvenation and Urban Transformation) to provide better guidelines for the balanced development of the existing area as well as incorporated new areas in the Master Plan.





2 DEMOGRAPHY

2.1 DEMOGRAPHIC CHARACTERISTICS

2.1.1 TOTAL POPULATION

Demography deals with the study of human population with respect to size, composition, spatial distribution and changes in population that occur over time etc. Magnitude of population gives an overall dimension of the physical environment and gives a basic information for the assessment of space requirement for various categories of land use within a region. Population assessment can be used to assist in determining the space required for facilities for all segments of the population. It also forms the basis of physical & social infrastructure designs. Thus, demographic analysis has major repercussions on housing market, physical infrastructure, social infrastructure and transportation.



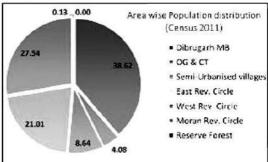
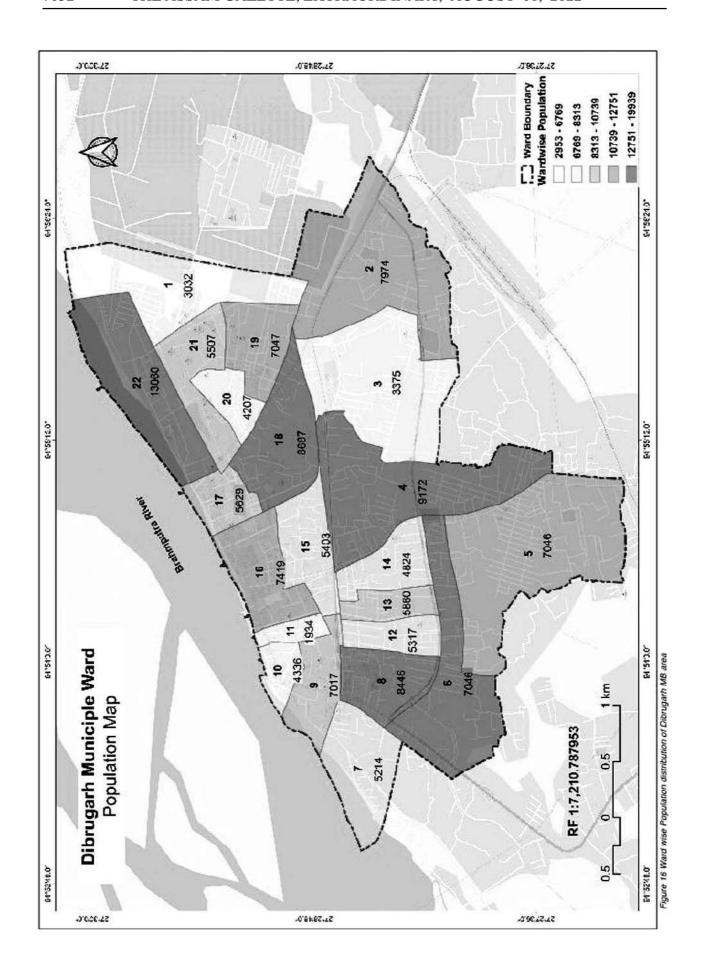


Figure 15 Population distribution of Dibrugarh Planning Area, 2011

The total existing population of Dibrugarh Planning Area is 3,61,397, out of which population of MB Area is 1,39,565 that comes

SI. No.	Existing Master Plan Area	Population (2011)	Percent
1	Dibrugarh Municipal Board (22 Wards)	1,39,565	38.62%
2	2 (Two) OG & 2 (Two) CT	14,731	04.08%
3	13 Semi-Urbanised villages from Dibrugarh East & West Rev. Circle	31,207	08.64%
4	53 villages from Dibrugarh East Rev. Circle	75,921	21.01%
5	115 villages from Dibrugarh West Rev. Circle	99,518	27.54%
6	2 villages from Moran Rev. Circle	455	00.13%
	TOTAL Population	3,61,397	100%

to 38.62% of the total population. Rural areas including Semi-Urban villages and the villages of East, West and Moran area contribute to 2,07,101 of about 57.31%. Out Growths and Census Towns contain population of 14,731, which is about 4.08% of the total planning area population.



2.1.2 MALE/FEMALE POPULATION

Table 20 Ward wise Population for Municipal area

Ward		Population		Ward No.		Population	n
No.	Male	Female	Total		Male	Female	Total
1	1531	1501	3032	12	2820	2551	5371
2	4055	3919	7974	13	3013	2847	5860
3	1647	1728	3375	14	2452	2372	4824
4	4507	4665	9172	15	2721	2682	5403
5	3418	3628	7046	16	4488	2931	7419
6	4575	4430	9005	17	2915	2714	5629
7	2624	2590	5214	18	4438	4249	8687
8	4350	4096	8446	19	3588	3459	7047
9	3809	3208	7017	20	2096	2111	4207
10	2421	1915	4336	21	2818	2689	5507
11	1046	888	1934	22	7052	6008	13060
		TOTAL			72384	67181	139565

(Source: Census of India)

2.1.3 POPULATION GROWTH RATE

Table 21 Population Increase and Decadal Growth Rate of DMB and OG

	1951	1961	1971	1981	1991	2001	2011
Total Population	37991	58480	80348	No census for Assam	120127	133571	145488
Decadal Growth Rate	63.82%	53.93%	37.39%	-	49.51 % (for two decades)	11.19%	8.90%

(Source: Census of India)

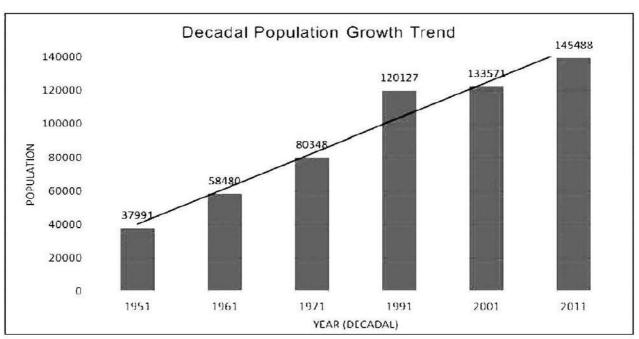


Figure 17 Population growth trend of last six decades

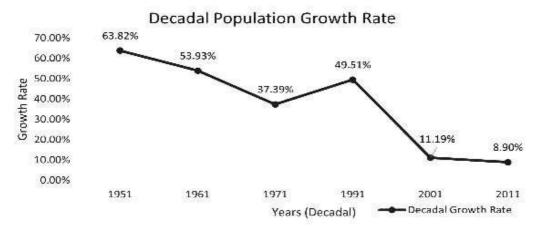


Figure 18 Population growth rate of last six decades og DMB+OG Area

(Source: Census of India, 2011)

The table 21 represents the increase in numbers of total population of Dibrugarh Municipal Boardand OG area relative population growth rate trend of past six decades. The table clearly reveals that the Dibrugarh MB and OG area witnessed a high growth rate of almost 64 percent in the period 1941-51. During the period 1951-61 Dibrugarh MB and OG area recorded a decadal growth rate of 53.93%. However, the Census population count was not carried out in Assam in year 1981 for the Decade 1971-81, the growth rate was considered as 49.51% of two decades for 1971-91 thereafter sudden low growth scenario was observed throughout the Dibrugarh MB region for year 2001. After this drop-in growth rate, the Dibrugarh MB area observed stabilization in 2001-11 period with a moderate increase in population up to 145488 with decadal growth rate of 8.90%. This is attributed to the fact that Dibrugarh is attracting a lot of population in the working sector due to top priority given by the administration along with improvements in social security in the systems.

2.1.3.1 Comparative Growth Rate of Master Plan area with State and District

Growth rate % Particular 2001 2011 18.92 17.62 Assam 13.62 11.92 Dibrugarh district Dibrugarh Municipal Board Area 11.19 8.90 Dibrugarh Master Plan Area 13.81 18.11

Table 22 Comparison of Growth Rate

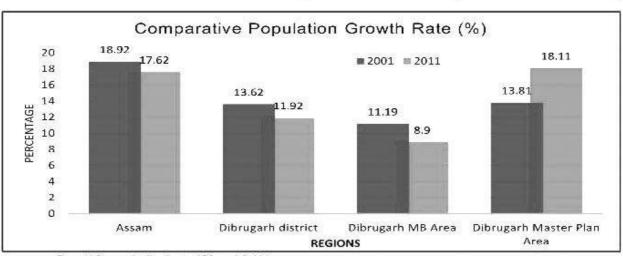


Figure 19 Comparative Growth rate of Dibrugarh District

2.1.3.2 Decadal growth rate of Master Plan area

Table 23 Decadal Growth Rate of Master Plan area

Decadal year	Population	Growth Rate
1991	2,68,842	32.5
2001	3,05,974	13.81
2011	3,61,397	18.11

(Source: Census of India 1991, 2001, 2011)

2.1.4 POPULATION DENSITY

The Dibrugarh Master Plan area comprises of total area of 391 sq.km with a total population of 3.61 Lakhs.

The table 24 indicates that the overall population density of the Dibrugarh Master Plan area is 982 ppu (Persons Per Unit) in 2011. Here, 1 sq.km. of area is considered as single Unit for population density. The highest density is in Municipal Board area which is around 8964 ppu and minimum density is in 2 villages from Moran revenue circle which is around 93 ppu. It is observed from the table that the average density of Dibrugarh Master Plan area as of 2011 is 982 persons per unit excluding Reserve Forest area.

The 13 semi-urbanised villages from Dib. East and West area has population density of 1332 person per unit, whereas rural area (considering 168 villages of Dibrugarh East-West Circle and 2 villages of Moran revenue circle) has a population density of 549 person per unit only.

Table 24 Population Density for different regions of Master Plan area

SI. No.	Particulars	Area (sq. km)	Population	Population Density (person/sq.km.)
1	Dibrugarh Municipal Board (22 Wards)	15.57	139565	8964
2	2 (Two) OG & 2(Two) CT	8.53	14731	1728
3	13 Semi-Urbanised villages from Dibrugarh East & West Rev. Circle	23.42	31207	1332
4	53 villages from Dibrugarh East Rev. Circle	89.37	75921	850
5	115 villages from Dibrugarh West Rev. Circle	226.14	99518	440
6	2 villages from Moran Rev. Circle	4.89	455	93
7	Reserved Forest (R.F.)	23.08	-	*
То	tal for GIS base Dibrugarh Master Plan	391	361397	982 (exc. R.F.)

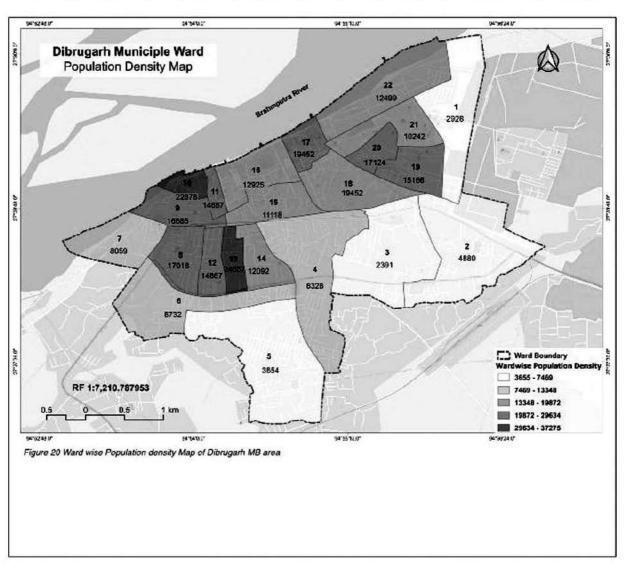
(Source: Census of India, 2011 and Consultant Compilation)

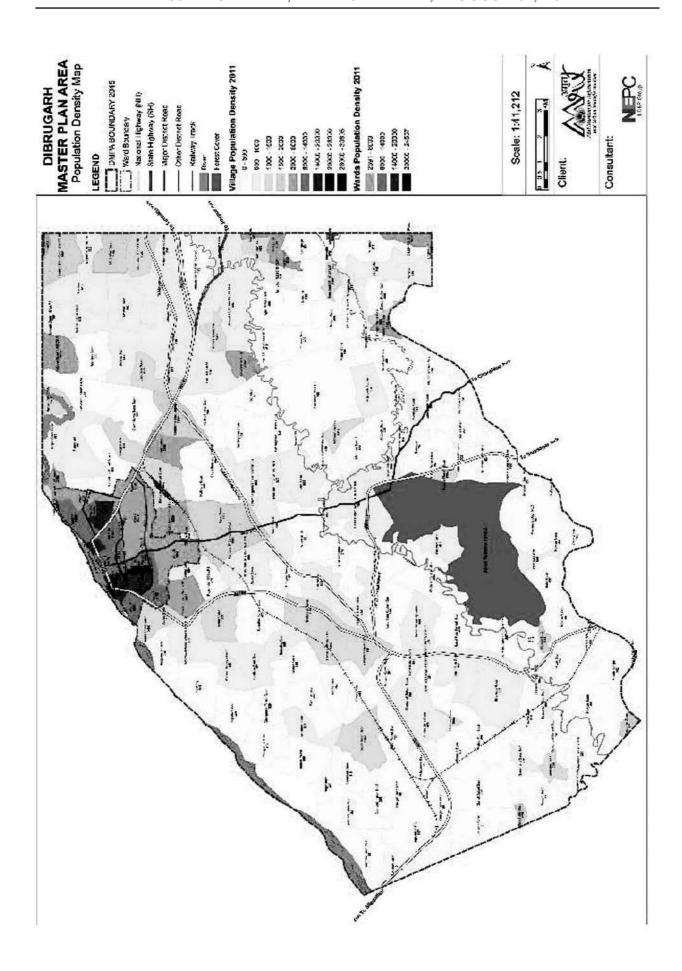
From table 25 of Dibrugarh Ward wise population density data, it is found that Ward no.10 is the densest comprising 30971 persons per unit and Ward no.1 is the least with 3369 person per unit.

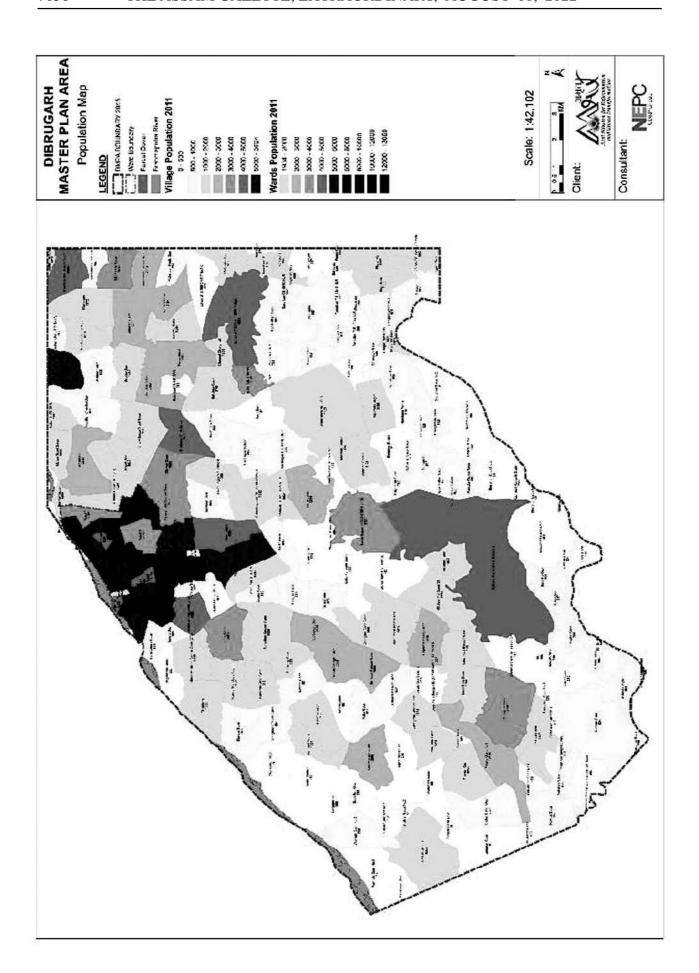


Table 25 Dibrugarh MB area Ward wise population density

	Pop	ulation Densi	ity			Population Den	sity
Ward No.	Area (sq.km)	Population	Density (person/ sq.km)	Ward No.	Area (sq. km)	Population	Density (person/ sq.km.)
1	0.9	3032	3369	12	0.36	5371	14919
2	1.64	7974	4862	13	0.26	5860	22538
3	1.18	3375	2860	14	0.35	4824	13783
4	1.29	9172	7110	15	0.63	5403	8576
5	1.61	7046	4376	16	0.61	7419	12162
6	1.32	9005	6822	17	0.38	5629	14813
7	0.63	5214	8276	18	0.88	8687	9872
8	0.46	8446	18361	19	0.46	7047	15320
9	0.44	7017	15948	20	0.27	4207	15581
10	0.14	4336	30971	21	0.45	5507	12238
11	0.15	1934	12893	22	1.09	13060	11982







2.1.5 SEX RATIO

Sex ratio is a valuable source for finding the population of women from the total population and that is the ratio of women to that of men in a particular area. In the Census 2011, it was revealed that the sex ratio in India for 2011 is 940 females per 1000 of males. The Sex Ratio of 2011 shows an upward trend from the census 2001 data. Census 2001 revealed that there were 933 females to that of 1000 males. India has seen a decrease in the sex ratio till 2001, but after that there has been in slight increase in the sex ratio. The sex ratio in Dibrugarh district is much higher than the national and state sex ratio, whereas it is less in Dibrugarh MB area as 928.

Table 26 Sex ratio of India

S. No	Country	year	2001	2011
1	India	Sex Ratio	933	940

(Source: Census of India 2001 & 2011)

Table 27 Regional Companson of Sex ratio

Region	Sex ratio
India	940
Assam	958
Dibrugarh District	961
Dibrugarh MB	928

(Source: Census of India 2011)

Table 28 Sex ratio of GIS based Master Plan area

SI.No	Description	Population	Sex Ratio
1	Dibrugarh Municipal Board (22 Wards)	139565	928
2	2 (Two) OG & 2(Two) CT	14731	1001
3	13 Semi-Urbanised villages from Dibrugarh East & West Rev. Circle	31207	971
4	53 villages from Dibrugarh East Rev. Circle	75921	957
5	115 villages from Dibrugarh West Rev. Circle	99518	971
6	2 villages from Moran Rev. Circle	455	904
	Total for GIS based Dibrugarh Master Plan	361397	952

(Source: Census of India, 2011 and Consultant Compilation)

Observations from the table 28 have concluded that the Female population is higher in OG and CT area compare to male population, whereas it is lower in two villages fall under Moran revenue circle area.



2.1.6 LITERACY RATE

Table 29 Literacy rate in Dibrugarh GIS Based Master Plan area

SI. No.	Description	Population	Pop. excluding 0-6 age	Actual Lit. Pop.	Male Lit.	Female Lit.	% of Total Lit.	% of Male Lit.	% of Female Lit.
1	Dibrugarh Municipal Board (22 Wards)	139565	126754	113343	60555	52788	89.41	92.08	86.55
2	2 (Two) OG & 2(Two) CT	14731	13228	11505	5993	5512	86.97	90.50	83.43
3	13 Semi- Urbanised villages from Dib. East & West Circle	31207	27918	24095	12705	11390	86.30	89.79	82.72
4	53 villages from Dibrugarh East Rev. Circle	75921	66084	43379	25176	18203	65.64	74.58	56.30
5	115 villages from Dibrugarh West Rev. Circle	99518	86656	63619	35728	28388	73.42	81.33	66.43
6	2 villages from Moran Rev. Circle	455	411	366	198	168	89.05	92.52	85.28
	Total	361397	321051	256307	140355	116449	79.83%	85.36%	74.35%

(Source: Census of India, 2011)

Literacy Rate of MPA

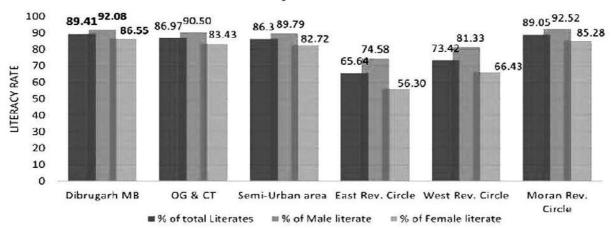


Figure 21 Total and male Female Literacy rate of Dibrugarh Master Plan area

The literacy rate of Dibrugarh Master Plan area is 79.83% in which Male literacy rate is 85.36% and female literacy rate is 74.35%. The highest male and female literacy rate is observed in Dibrugarh MB area compare to all other delineated area of MP boundary. The lowest literacy found in villages of east revenue circle.

Table 30 Regional Comparison of Literacy rate

Region	Literacy rate (2011 census)		
Assam	72.19%		
Dibrugarh dist.	76.05%		
Dibrugarh Master Plan area	79.83%		

2.1.7 WORKING AND NON-WORKING POPULATION

Table 31 Working and Non-working population in Master plan area

SI. No	Name of Area	Population	Workers	Non- Workers	% of Worker in total population	% of Non-Worker in total population
1	Dibrugarh Municipal Board	139565	52986	86579	37.96	62.04
2	OG & CT	14731	5247	9484	35.62	64.38
3	13 Semi-Urbanised villages	31207	11630	19577	37.27	62.73
4	53 villages of Dibrugarh East Revenue Circle	75921	31135	44786	41	59
5	115 villages of Dibrugarh West Circle	99518	42903	56615	43,11	56.89
6	2 villages of Moran Circle	455	285	170	62.64	37.36
- 1	Total	361397	144186	217211	39.90%	60.10%



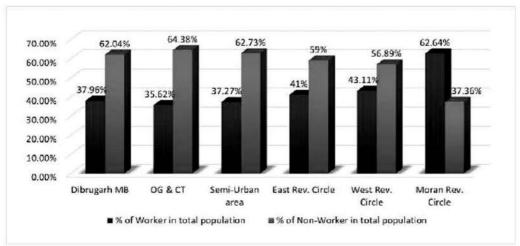


Figure 22 Work force participation rate of Master Plan area



2.1.8 SC-ST POPULATION

2.1.8.1 SC/ST Population of Dibrugarh MB Area

Table 32 SC/ST Population ward wise

Ward	Total Population	SC Population	ST Population	%sc	% ST
1 1	3032	787	67	25.96	2.21
2	7974	377	693	4.73	8.69
3	3375	227	265	6.73	7,85
4	9172	829	876	9.04	9.55
5	7046	955	533	13.55	7.56
6	9005	1189	475	13.20	5.27
7	5214	781	79	14.98	1.52
8	8446	586	22	6.94	0.26
9	7017	1092	72	15.56	1.03
10	4336	50	0	1.15	0.00
11	1934	0	7	0.00	0.36
12	5371	396	0	7.37	0.00
13	5860	360	12	6.14	0.20
14	4824	160	22	3.32	0.46
15	5403	236	191	4.37	3.54
16	7419	516	146	6.96	1.97
17	5629	573	5	10.18	0.09
18	8687	727	176	8.37	2.03
19	7047	495	147	7.02	2.09
20	4207	377	47	8.96	1.12
21	5507	438	76	7.95	1.38
22	13060	832	178	6.37	1.36
Total	139565	11983	4089	8.59	2.93

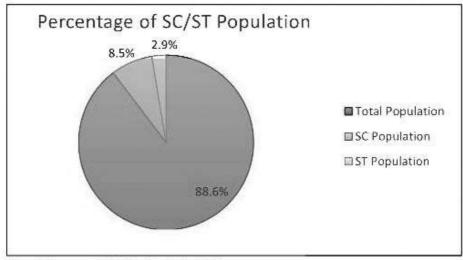


Figure 23 Percentage of SC/ST Population in Municipal Area

2.1.8.2 SC/ST Population of OG/CT area

Table 33 SC/ST population of OG/CT Area

Name of OG / CT	Total Population	SC Population	ST Population	%SC	% ST
Mohpuwalimora Gohain Gaon (OG)	1425	16	0	1,12	0
Tekela Chiring Gaon (OG)	4498	749	102	16.65	2.26
Niz-Mancotta (CT)	5924	50	1891	0.84	31.92
Barbari (CT)	2884	292	126	10.12	4.36
Total	14731	1107	2119	7.51	14.38

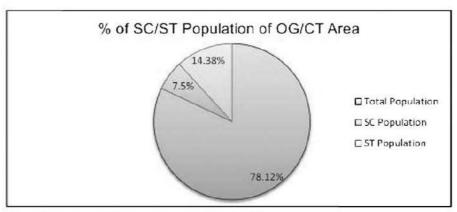


Figure 24 Percentage of SC/ST Population in OG/CT Area in 2011

2.1.8.3 SC/ST Population of Rural Area

Table 34 SC/ST population in Rural area

Name	Total Population	SC Population	ST Population	%SC	% ST
Rural Area Population	207101	8672	18597	4.18	8.98

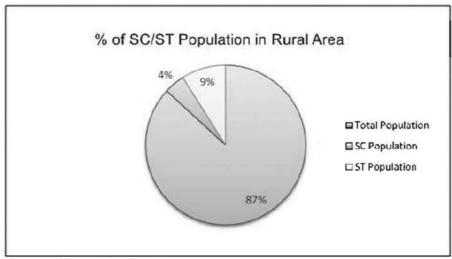


Figure 25 SC/ST population of Rural Area

2.2 MIGRATION POPULATION

Migration into Assam is not a recent phenomenon; it is an age-old process since the British colonial period. However, it has occurred on a relatively larger scale in more recent decades particularly after 1971. Although migrants coming to Assam include people from the rest of India as well as from the neighbouring countries of Bangladesh, Nepal and Pakistan, it is the second group which has been a focus of attention during last several years. The high population pressure on land drive huge influx of farm labourer from Bangladesh to Assam. The economic potentiality of the region along with reluctant nature of indigenous people and absence of capital and entrepreneurship made such immigration a vital one.

Out of the total population in Assam about 3.91 percent and 2.65 percent are migrants during 1991 and 2001, of which about 1.51 per cent and 0.71 per cent constitute as the international migrants for the respective years particularly from the countries.

Along with the international migration the migrants from the other states of India also contributes significant volume of population growth in Assam. Out of the total migrants, the interstate migrant into Assam contributes about 2.39 per cent and 1.93 per cent during 1991 and 2001.

The existence of labour market, employment prospects in the destination area attracts the huge influx of migrants from the different districts of India, leading to structural disequilibrium and cultural mess-up in the region. The differential natures of migrant population from the different parts of the country along with the international migrants lead to the modification of the original population structure of the state of Assam. It also leads to the population redistribution among the states of the country, creating tension or pressure on the land of Assam and its indigenous population.

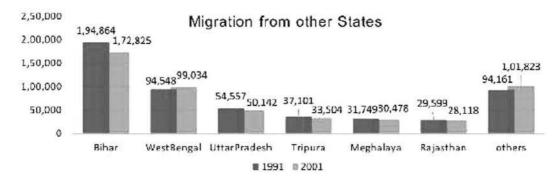


Figure 26 Inter State migration trend for year 1991-2001

Table 35 Interstate migration trend in Assam, 1991-2001

	Volume of M	ligration (other states of Ind	ia) in Assam, 199	91-2001		
C4-4		1991	2001			
States	No. of Migrants	Percentage of total migrants	No. of Migrants	Percentage of total migrants		
Bihar	1,94,864	36.31	1,72,825	33.5		
West Bengal	94,548	17.62	99,034	19.19		
Uttar Pradesh	54,557	10.17	50,142	9.72		
Tripura	37,101	6.91	33,504	6.49		
Meghalaya	31,749	5.92	30,478	5.91		
Rajasthan	29,599	5.52	28,118	5.45		
others	94,161	17.55	1,01,823	19.74		
Total	5,36,579	100	5,15,924	100		

(Source: India tourist statistic, 2015)

		1991					2001				
SI.No.	Districts	Total migrants	% of total migrants	% of male migrants	% of female migrants	Total migrants	% of total migrants	% of male migrants	% of female migrants		
1	Dibrugarh	6790	0.65	0.71	0.58	3522	0.3	0.33	0.26		

Table 36 Spatial distribution of migrants from outside India, 1991-2001

(Source: India tourist statistic, 2015)

Table 37 Spatial distribution of migrants from other states of India, 1991-2001

CI			1991				2001			
SI No	Districts	Total migrants	% of total migrants	% of male migrants	% of female migrants	Total migrants	% of total migrants	% of male migrants	% of female migrants	
1	Dibrugarh	27448	3.93	3.3	2.51	34225	2.92	3.3	2.51	

(Source: India tourist statistic, 2015)

The processes of human movement are always associated with number of reasons including social, cultural, political reasons, employment, business, education, marriage, family movement, etc. People move from one area to another for fulfilment of required and better facilities of amenities. The areas appalling poverty, unemployment, low and uncertain wages, uneconomic land holdings, poor facilities for education, health, recreation etc. move forward the people to migrate to another place where batter facility prevails. Thus, it is the push and pull factor acts as ingredients of population migration. Among all the reasons of migration, marriage (36.48 per cent) is considered as the single largest reason for migration. This reason of migration is more pronounced among the females (58.79 per cent) than the male (1.59 per cent) counterparts as female are forced to migrate under the social custom of marriage system. While after marriage, family movement (15.08 per cent) is also another prominent reason for migration followed by employment, (5.55 per cent) trade and commerce (2.83 per cent), movement after birth (1.03 per cent) and education (0.69 per cent).

Most of the family movement form of migration is governed by religious and political reasons of migration process. The shortage of labour force in the primary and secondary sector of economic activity generates the employment opportunity which attracts the large volume of migrants into Assam both in the form of interstate and international migrants. Similarly, the lack of skill of trade and commerce among the people of Assam attracts the large volume of traders to the region.

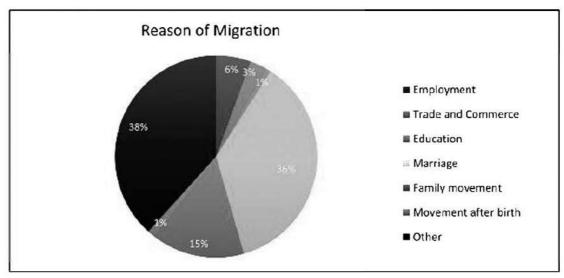


Figure 27 Reason of migration, Census 2011

2.3 HOUSEHOLD DENSITY AND HOUSING SIZE

Table 38 Household Density

SI. No.	Name of Area	No. Of Household	Area (Sq.km)	Household Density
1	Dibrugarh Municipal Board (22 Wards)	30525	15.50	1960
2	2 (Two) OG 8 2(Two) CT	3294	8.53	386
3	13 Semi-Urbanised villages from Dibrugarh East & West Rev. Circle	6878	23.42	294
4	53 villages from Dibrugarh East Rev. Circle	15819	89.37	177
5	115 villages from Dibrugarh West Rev. Circle	20231	226.14	89
6	2 villages from Moran Rev. Circle	89	4.89	18
	Total	76836	367.92 (Excluding R.F.)	209

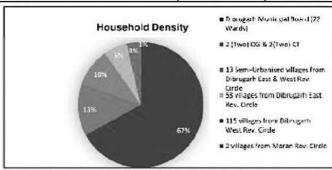


Figure 28 Household density of Dibrugarh Master Plan Area 2011

Table 39 Housing Size

Wards	Total No. of Households	Area (Sq km)	HH Density (No. of HH)	Housing size
1	656	0.9	729	4.6
2	1854	1.64	1130	4.3
3	774	1.18	656	4.3
4	2204	1.29	1708	41
5	1699	1.61	1055	4.1
6	2152	1.32	1630	4.1
7	1206	0.63	1914	4.3
8	1823	0.46	3963	4.6
9	1359	0.44	3088	5.1
10	878	0.14	6271	4.9
11	324	0.15	2160	5.9
12	1192	0.36	3311	4.5
13	1340	0.26	5153	4.3
14	1079	0.35	3082	4.4
15	1266	0.63	2010	4.2
16	1369	0.61	2244	5.4
17	1070	0.38	2815	5.2
18	1851	0.88	2103	4.6
19	1599	0.46	3476	4.4
20	942	0.27	3488	4.4
21	1211	0 45	2691	4.5
22	2677	1.09	2456	4.8
Total	30525	15.5		4.5

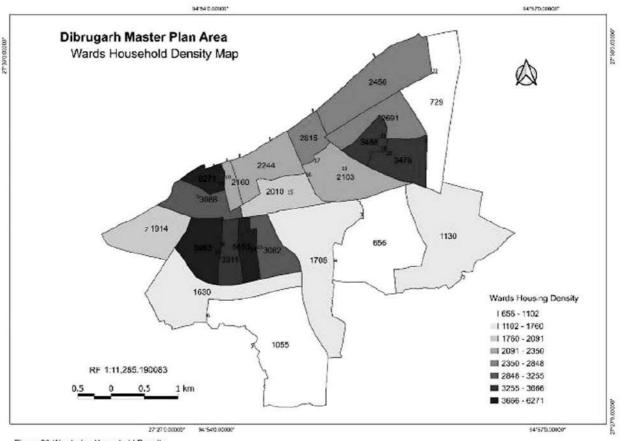


Figure 29 Ward wise Household Density



2.4 POPULATION PROJECTION

Population projection is a forecasting tool that helps to estimate the changes in population size and demographic structure. It is mandatory for Government policy makers and planners to determine the future demand for basic human needs such as food, water, education, health, energy and other services and to forecast future demographic characteristics. The main objective is to provide or undertake activities aimed at achieving population stabilization, sustainable and environmental protection by the year 2045.

Population projection is a scientific/mathematical attempt to peep into the future population scenario, conditioned by making certain assumptions using data to the past available at the point of time. Assumptions used and their probability of adhering in future forms a critical input in this mathematical effort. Predicting the future course of human fertility and mortality is not easy, especially when looking beyond much further in time. Medical and health intervention strategies, food product and its equitable availability, climatic variability, socio-cultural setting, economic condition and a host of other factors influence population dynamics, making it a somewhat unpredictable exercise. Therefore, much caution must be exercised when either making or using the population projection and the context of various conditions imposed, should not be lost sight of on the basis of past behaviour and the likely future scenario assumed.

In Dibrugarh Planning area different mathematical methods are used for the estimation of projected population for the horizon year are Arithmetic Progression Method, Geometric Progression Method, Incremental Increase Method and Average Arithmetic Incremental Increase method.

2.4.1 ARITHMETIC PROGRESSION METHOD

This method is suitable for large and old city with considerable development. If it is used for small, average or comparatively new cities, it will give lower population estimate than actual value. In this method, the average increase in population per decade is calculated from the past census reports. This increase is added to the present population to find out the population of the next decade. Thus, it is assumed that the population is increasing at constant rate.

- Hence, dP/dt = C i.e., rate of change of population with respect to time is constant.
- Therefore, Population after nth decade will be Pn= P + n.C (1)
- Where, Pn is the population after 'n' decades and 'P' is present population.

Table 40 Population projection for 2045 based on Arithmetic Progression Method

Method	1991	2001	2011	2021	2031	2041	2045
Arithmetic Progression Method	268842	305974	361397	395585	437832	480080	496979

(Source: Consultant Compilation)

2.4.2 INCREMENTAL INCREASE METHOD

This method is modification of arithmetical increase method and it is suitable for an average size town under normal condition where the growth rate is found to be in increasing order. While adopting this method the increase in increment is considered for calculating future population. The incremental increase is determined for each decade from the past population and the average value is added to the present population along with the average rate of increase.

- Hence, population after nth decade is Pn = P+ n.X + (n (n+1)/2).Y (3)
- Where, Pn = Population after nth decade
- X = Average increase
- Y = Incremental increase

Table 41 Population projection for 2045 based on Incremental Increase Method

Method	1991	2001	2011	2021	2031	2041	2045
Incremental Increase Method	268842	305974	361397	405816	521004	709132	728896

(Source: Consultant Compilation)

2.4.3 GEOMETRIC PROGRESSION METHOD

In this method, the percentage increase in population from decade to decade is assumed to remain constant. Geometric mean increase is used to find out the future increment in population. Since this method gives higher values and hence should be applied for a new industrial town at the beginning of development for only few decades. The population at the end of nth decade 'Pn' can be estimated as:

- Pn = P (1+ IG/100) n (2)
- Where, IG = geometric mean (%)
- P = Present population
- n = no. of decades.

Table 42 Population projection for 2045 based on Geometric Progression method

Method	1991	2001	2011	2021	2031	2041	2045
Geometric Progression Method	268842	305974	361397	403731	527105	786329	829403

(Source: Consultant Compilation)

2.4.4 AVERAGE ARITHMETIC INCREMENTAL INCREASE METHOD

This method is modification of arithmetical increase method and incremental increase method. It is suitable for an average size town under normal condition where the growth rate is found to be in moderately increasing order. While adopting this method the average of arithmetic and increase in increment is considered for calculating future population. The increase is determined for each decade from the past population considering results of both the method and average value is added to the present population.

Table 43 Population Projection based on Average Arithmetic Incremental Increase method

Year	Projected Population for DMPA 2045	% of Increase	
1991	268842	-	
2001	305974	13.81	
2011	361397	18.11	
2021	417572	15.54	
2031	470719	12.73	
2041	527424	12.05	
2045	551757	4.61 (in 4 years)	

(Source: Consultant Compilation)

2.5 POPULATION PROJECTION FOR 2045

Population projection has been done using all the four methods. It is important to note that none of the above-mentioned methods is empirical, and they are based on probability. Out of them, Average Arithmetic Incremental Increase Method has been considered suitable for Dibrugarh Master Planning Area. 1991, 2001 and 2011 figures are from the Census of India and 2021, 2031, 2041 & 2045 figures are estimated by the consultant.

Table 44 Population Projection

Year	1991	2001	2011	2021	2031	2041	2045
Population	268842	305974	361397	417572	470719	527424	551757



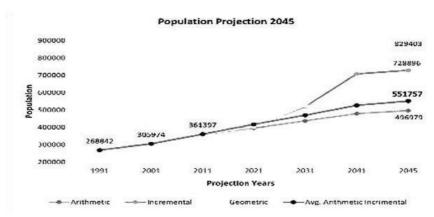


Figure 30 Population Projection for 2045 (Source: Consultant Compilation)



2.5.1 WARD WISE POPULATION PROJECTION

Table 45 Ward wise population projection

Wards	Population (2011)	Estimated population (2021)	Estimated population (2031)	Estimated population (2041)	Estimated population (2045)	Population Density (Person/ Sq.km)
1	3032	3503	3949	4425	4629	4451
2	7974	9213	10386	11637	12174	7469
3	3375	3899	4396	4926	5153	3655
4	9172	10597	11946	13386	14003	9657
5	7046	8141	9177	10283	10757	5878
6	9005	10404	11729	13142	13748	13348
7	5214	6024	6791	7609	7960	12246
8	8446	9758	11001	12326	12895	26316
9	7017	8107	9140	10241	10713	25507
10	4336	5010	5648	6328	6620	34842
11	1934	2235	2519	2823	2953	22715
12	5371	6206	6996	7839	8200	28276
13	5860	6771	7633	8552	8946	37275
14	4824	5574	6283	7040	7365	18412
15	5403	6243	7037	7885	8249	16835
16	7419	8572	9663	10828	11327	19872
17	5629	6504	7332	8215	8594	29634
18	8687	10037	11315	12678	13263	17923
19	7047	8142	9179	10285	10759	23389
20	4207	4861	5480	6140	6423	25692
21	5507	6363	7173	8037	8408	15570
22	13060	15090	17010	19060	19939	19172
Total	139565	161253	181781	203686	213078	13,747

It is observed from table 45 that the estimated population growth rate for all individual wards will derive a huge amount of population in upcoming decades. If we calculate the probable population density for year 2045 in every wards it gives a huge number of population per sq.km of area which clearly indicates the spill over of compare to the carrying capacity of the ward. It concludes that there is an immediate demand to decentralise the population and the creation of more new wards within planning area.



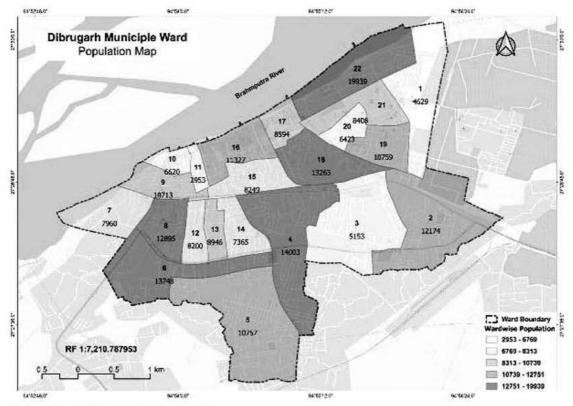


Figure 31 Ward wise Population Projection for 2045

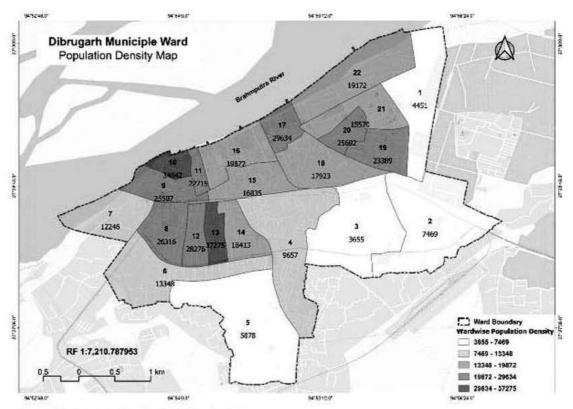


Figure 32 Ward wise Population Density Projection for 2045

3 ECONOMIC BASE AND EMPLOYMENT

Economy can be defined as the interrelated activities that deal with consumption and production. Different activities that provide employment opportunities and income constitute the economic base of an area. Local economy depends of the economic base of an area. The economic sector needs to be tapped well and contribute for the growth of the planning area and region. Therefore, the region requires strong economic magnets for future economic development of the Region. Sometimes during religious festivals and melas, tourist activity and non-availability of employment for unskilled population we can also see some development in informal sector also which has been an important issue of physical planning in Dibrugarh.

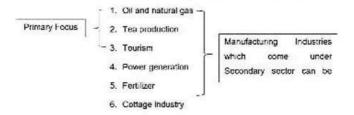
Sectors of Economy

Table 46 Sector wise economic distribution

Primary Sector	Agriculture & Horticulture, Sericulture & Fishing, Oil & Gas, Animal Husbandry
Secondary Sector	Manufacturing, Household Industries, Construction.
Tertiary Sector	Trade, Tourism, Hotels & Restaurants, Transport, Storage & Communication, Banking and Informal sector

Dibrugarh Local Economic Base

Dibrugarh is considered as an economic hub of North East region of India, because of the following industries:



Economy Scenario

Economy of a city plays an important role in determining the future pattern of growth and economic development. Dibrugarh being a famous tourist center, tourism is one of the major sources of economy. Apart from that, people are dependent on fishing and agricultural sectors for economy generation. According to the census of 2011, the total working population of the Dibrugarh Planning Area is around 144186, out of which male working population is 1.01 lakhs and 40,552 is female working population. This clearly indicates that 2.17 lakhs are dependent population in the Dibrugarh Planning Area. As far as the total working population is concerned, more than two third (78.88 %) of the working population is engaged in tertiary sector, (18.34 %) in primary sector and very meagre i.e. 2.78 % are in secondary sector.



3.1 FORMAL SECTOR

Formal sectors represent all jobs with specific working hours and regular wages and the worker's job is assured. The workers are employed by the government, state or private **sector** enterprises. It is a licensed organization and is liable to pay taxes. It includes large-scale operations such as banks and other corporations.

3.1.1 PRIMARY SECTOR

3.1.1.1 Agriculture & Horticulture

The majority of the population are occupied in farming of rice, sugar-cane, pulses and fish farming. Dibrugarh has the world's largest area covered by tea gardens. The entire district is surrounded by tea plantations and has tea factories. Many tea gardens are more than 100 years old. Horticultural crop in the State occupy about 15 percent gross cultivated area and annually produces more than 15.0 lakhs MT of fruits, 44.0 lakhs MT of vegetables and 2.0 lakhs MT of spices besides nut crops, flowers and medicinal & aromatic plants thus contributing significantly towards food and nutritional security of the State.

3.1.1.2 Tea

Dibrugarh hosts several tea gardens dating back to the British era. The first garden was at Chauba, a place 20 miles (32 km) away from Dibrugarh, owned by Maniram Devaan. Today, the headquarters of the Directorate of Development of Small Tea Growers in India is functioning from Dibrugarh, besides a Regional Office of the Tea Board of India headed by a Deputy Director of Tea Development (Plantation) is also located in the city. The Zone I of the Assam Branch Indian Tea Association (ABITA) is located at Dibrugarh.

Table 47 Tea Estates in the city

Name of the estate	Location	Name of the estate	Location
Debiation Too Fatata		Banamalie Tea Estate	
Behiating Tea Estate		Jalan South Tea Estate	
Durgapur Tea Estate	Dibrugarh	Borah Tea Estate	
Sahu Tea Estate		Bokal Tea Estate	
Barborah Tea Estate		Bukel Tea Estate	Dibarrant Free
Barbarooah Tea Estate	West	Greenwood Tea Estate	Dibrugarh East
		Muttuck Tea Estate	
1 N T F-1-1-		Ghograjan Tea Estate	
Lepetkatta Tea Estate		Ganeshbari Tea Estate	
		Madarkhat Tea Estate	

(Source: Tea Garden Atlas, Ministry of Commerce and Industry)

Table 48 Total Area and Classification of Area in Assam, 2016-17 (P)

SI. No.	District	Geographical Area (in Hect.)	Reporting Area for Land Utilisation (in Hect.)	Forest (in Hect.)
1	Assam (2015-16)	7843800	7843800	1852676
	Assam (2016-17)	7843800	7843800	1852694
2	Dibrugarh	338100	338100	21794

(Source: Directorate of Economic and Statistics)



SI.		Not available for Cultivation (in Hect.)						
		1 2	2	1000	4	5	6	
No.	District	Water Logged Land	100000000000000000000000000000000000000		Other Land	Total (Col.1 to Col.4)	Barren and Unculturable Land	Total (Col.5to Col.6)
	Assam (2015-16)	63563	11651	148797	1057902	1281913	1199612	2481525
1	Assam (2016-17)	66193	11698	147824	1067497	1293212	1191251	2484463
2	Dibrugarh	1608	172	5571	108713	116064	17126	133190

		Other Uncultivated Land Excluding Fallow Land(in Hect.)								
SI. No.	District	Permanent pastures and other Grazing Land	Land ur	Land under Misc. Trees groves not included in Net Area sown		Culturable Waste Land	Total Land			
1	Assam (2015- 16)	166919		221578		137233	525730			
	Assam (2016- 17)	169745		222490		143509	535744			
2	Dibrugarh	4825		12131		8729	25685			
		Fallow La	and (in He	ct.)	Net area	Total	Area Sown			
SI. No	. District	Fallow Land other than Current Land	Current Fallow	Total	Sown (in Hect.)	cronned	morethan once (in Hect.)			
	Assam (2015- 16)	88336	94061	182397	2801472	4059934	1258452			
1	Assam (2016-	92286	104758	197044	2773855	4087449	1313594			

3.1.1.3 Sericulture & Fishing

2

17)

Dibrugarh

92286

5311

Sericulture is an age cottage industry of the rural people. It is done during the agricultural off season as a subsidiary occupation. The popular and durable Endi and Muga are the products of this industry. Muga is a non-mulberry silk. The most popular among the large variety of fishes are Rahu, Bahu, Mirika, Pithila, Kurhi, Bhangon, Barali etc. The smaller variety of fishes Kaoi, Magur, Singee, Pabha, Eleng, Bariala are common.

197044

10411

2773855

147020

160517

1313594

13497

104758

5100

3.1.1.4 Animal Husbandry

Livestock plays an important role in state economy. Agriculture economy is supplemented by animal husbandry. Agriculture production depends very much on the livestock available. Cattle and goats are main animals. Buffaloes, Sheep, Horses, Pigs, Fowls and Ducks are the livestock and poultry found in the district.

Fish is abundantly available in all the districts of Assam, as it is a land of rivers, bils, swamps, ponds etc. The most popular among the large variety of fishes are Rahu, Bahu, Mirika, Pithila, Kurhi, Bhangon, Barali etc. The smaller variety of fishes Kaoi, Magur, Singee, Pabha, Eleng, Bariala are common. The development of fisheries in the district is undertaken by the Government after independence. The Department of Fisheries has one natural seed collection centre at Kotoha near Dihing River.

3.1.1.5 Oil

The first oil well dug during the British era was in Digboi, 50 miles (80 km) from Dibrugarh. Today, Duliajan, Dikom, Tengakhat and Moran are the key locations for oil and gas industry in the district. Oil India Limited, the second public sector company in India engaged in exploration and transportation of crude oil has its field headquarters in Duliajan, 50 km from Dibrugarh city. The company was granted Navratna status by the Ministry of Petroleum and Natural Gas, in 2010.

AGCL

Assam Gas Company Limited (Duliajan).

DNPL

Duliajan Numaligarh Pipeline Ltd is a joint venture company promoted by Assam Gas Company Limited (AGCL), Numaligarh Refinery Limited (NRL) and Oil India Limited (OIL). The Duliajan-Numaligarh pipeline will be the first major cross-country natural gas pipeline in Assam and once the availability of natural gas is ensured, it is expected to be extended to major consumption centers of natural gas in Nagaon and Guwahati.

BCPL

The Assam Gas Cracker Project, also known as Brahmaputra Cracker and Polymer Limited, was proposed as a part of implementation of Assam Accord signed by Government of India on 15 August 1985.



3.1.2 SECONDARY SECTOR

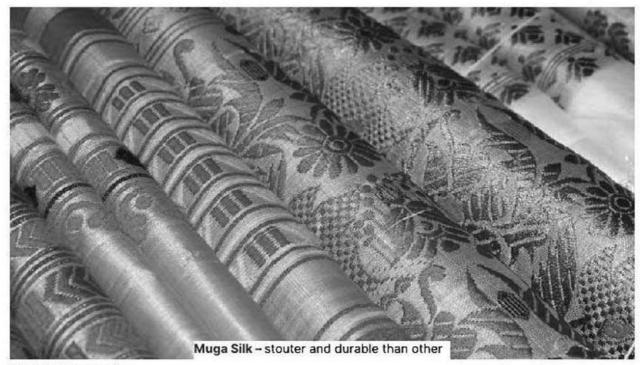
3.1.2.1 Household Industries (Handloom)

Weaving is one of the most important traditional occupations of the women in Dibrugarh district of Assam. Their artistic products have good demand in the market, and they are cherished by the tourists from other parts of the country as well as those from abroad. However, the productions on traditional looms are low besides time consuming. So, to train the weavers on modernized looms, three Handloom Training centres are opened in the district. During the year 2011-12 there were 23 trainees in these training centres.

Table 49 statistics of handloom demonstration circle & weaving

District	No. of Demonstration	No. of Villages	No. of weavers engaged		
District	Circles	covered	Part time	Whole time	Total
Dibrugarh	16	1067	56094	300	56394

(Source: Directorate of Economic and Statistics)



3.1.2.2 Construction

Every rural house has Choraghar (Receiption house), Borghar (living house), Bhoralghar (granary), Gohainghar (worship house), Gohalighar (cow shed), Pakghar (cookshed) etc. The houses are made of thatch, bamboo, reed, and mud. Wooden posts are also used. In the present day however house on modern line using C.I. sheet, brick and cement are quite common both in rural and urban areas.

3.1.2.3 Industries

Dibrugarh is considered as an economic hub of North East region of India. Dibrugarh is at the centre of economic activities dominated by the following industries:

- Oil and natural gas
- Tea production
- Tourism
- Power generation

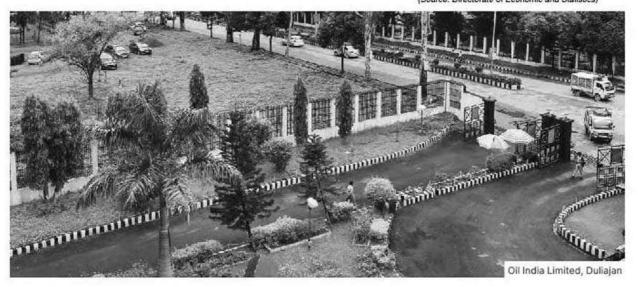
- Fertilizer
- Cottage industry
- Pharmaceuticals
- Cane and Bricks

A Large scale

Table 50 Industrial Units around the city

SI. No.	Industrial Units	Details
1	Oil India Limited, Duliajan	The oil found in this area led to installation of five refineries at Digboi, Guwahati, Bongaigaon, Numaligarh all in Assam and at Barauni in Bihar. Oil was discovered in Digboi in 1882 and it marked the birth of Oil Industry in India.
2	Brahmaputra Gas Cracker & Polymer Limited (BCPL), Lepetkata	It is a new industrial project which is under development in the Lepetkata region, about 15 km away from the Dibrugarh town. Has been seen as a great project with many scopes in terms of employment generation and economic growth of the state.
3	Brahmaputra Valley Fertilizer Limited, Namrup	It produces aluminium sulphate, urea and sulphuric acid. The raw material required for the plant is natural gas which is received from Assam Gas Company and the other raw material like sulphur is imported from outside.
4	Assam Gas Company Limited (AGCL), Duliajan	It distributes natural gas to various users and provide base for petro-chemical industry. The tea gardens also are benefited by its gas for running their factories.
5	Assam Petrochemicals Limited, Namrup	The main raw materials required are natural gas, urea and carbon dioxide and produces Methanol, Formalin and Petrol. It receives natural gas from Assam Gas Company. Urea and Carbon dioxide is received from Namrup fertilizer Factory.
6	Namrup Thermal Power Station, Namrup	It utilizes gas supplied by it as fuel from Assam Gas Company.
7	Andrew & Yule Ltd. (Khowang, Basmatia, Desam, Tinkong, Rajgarh Tea Estates)	Dibrugarh accounts for the finest Assam Tea that is drank anywhere in the world. There are several tea gardens dating back to the British era. The first garden was at Chabua,
8	Rossell India Ltd. (Romai Tea Estate)	32 km away from Dibrugarh, owned by Maniram Devaan. Today, the headquarters of the Directorate of Development of Small Tea Growers in India is functioning from Dibrugarh,
9	McLeod Russel India Ltd. (Dirai Tea Estate)	besides a Regional Office of the Tea Board of India headed by a Deputy Director of Tea Development (Plantation) is also located in the town. The Zone I of the Assam Branch Indian Tea Association (ABITA) is also located at Dibrugarh.
10	Tata Tea Ltd.	

(Source: Directorate of Economic and Statistics)



B Medium scale

Table 51 Medium scale industries

SI. No.	Industrial Units	Details
1	Plywood Industry	A good number of plywood factories are in Dibrugarh district. The products include commercial ply black board, flush door, marine plywood, tea chest.
2	Railway Workshop	The railway workshop located at Dibrugarh is one of the largest workshops in the North-East India. It undertakes overhauling works, repairing of locomotive and coaches. Various components required for this area are also manufactured here.

(Source: Directorate of Economic and Statistics)

Several industries engaged in manufacture of machinery, machine tools and parts, steel furniture, steel structure and other material products are established. The district has also many sawmills and bricks making industries, besides other various small-scale industries. There is good scope for further development but there are identified weaknesses that include - poor supply of electricity & high rate of electricity charges, insufficient supply of skilled labourers, transportation of goods, financial institutions lend money at higher rate and no marketing linkage with Public Sector Enterprises and Large Tea Gardens.

Table 52 Industrial units' data

		U	nits	
SI. No.	Type of Industry	Assam	Dibrugarh (district)	
1	Manufacturing of Food products and Beverage	1559	199	
2	Manufacturing of Textiles	60	7	
3	Manufacturing of Wood and its products	420	24	
4	Manufacturing of Rubber, Plastic Products	177	5	
5	5 Manufacturing of Non-Metallic mineral Products		116	
6	Manufacturing of fabricated Metal Products and Parts (except Machinery and equipment)	109	9	
7	Manufacturing of Electrical Machinery and Apparatus	61	3	
8	Manufacturing of other Transport equipment	12	1	
9	Printing, Publishing and reproduction of recorded media	43	3	
10	Manufacturing of chemicals and its products	152	7	
11	Manufacturing of basic metals	172	6	
12	Manufacturing of Machinery and equipment	50	7	
13	Manufacturing of Furniture	26	3	
14	Electricity, Gas, Steam and Hot water supply	43	6	
15	Sale, maintenance and repair of motorcycles and motor vehicles	113	16	
16	Retail trade, except for motor vehicles repair of personal and household goods	19	5	
17	Supporting and auxiliary transport activities (including warehousing and storage)	31	2	

(Source: Directorate of Economic and Statistics)

3.1.2.4 Clusters of MSMEs

There are two identified clusters of Micro & Small Enterprise, as shown below:

Table 53 Industrial Cluster

SI. No.	Name of the Cluster	Characteristics	Details
1	Fabrication and General Engineering Cluster	Principal products manufactured	MS Fabrication & Structure
		Name of the SPV	Not Finalized
		No. of the functional units	246
		Turnover of the clusters	Approx. Rs. 20 crores annually
		Employment in the cluster	1230
		Major issue/requirement	New Technology Requirement of skilled manpower Credit Flow Lack of knowledge of Govt. Schemes Linkage with CPSUs & Large Tea Gardens
		Thrust area	Need new technology to obtain quality standard
2	Bought Tea Leave Factory	Principal products manufactured	CTC, Orthodox Tea
		Name of the SPV	Not Finalized
		No. of the functional units	73
		Turnover of the clusters	Approx. Rs. 400 crores annually
		Employment in the cluster	1175
		Testing needs	Yes
		Thrust area	The potential of domestic market should be utilized because India is the biggest consumer of the tea, but per capita tea consumption is very low than the other countries. Promoting more flavours like fruits and herbatea into tea like ginger, lemon, elaichee, etc. will add up a new aren into tea industry. Furthermore, certain varieties of tea are grown only in Assam and are in great demand across the world.

(Source: MSME - Branch Development Institute, Karbi Anglong, Assam and Census, 2011)

Dibrugarh district is predominantly engaged in tea farming and industrial activities. It needs for further industrial development. But the town is mainly on tea, oil and rice products. Based on the available resources the following MSMEs found Industrial Potential in the district, as shown below:

Table 54 Potential for New MSMEs and Industries

Potential Areas for Service Industries	Potential for New MSMEs
Powder coating	This district has very good potential for MSME Sector as there are large requirements of products which can be manufactured in MSME sector. If strategically approach for development of MSME sector, the share of manufacturing sector under MSME can be raised as the CPSUs have to procure 20% of their annual 14 requirement from MSME Sector and at present it is only about 1% of total requirement achieved by the CPSUs of this district.
Interior decoration	
Electronic equipment /appliance	
Freight Transport	
Automobile Repairing & services	
Hotel cum Tourism	
Cold Storage	
Security Services	
Electric wiring/Electrical equipment repairing	
Computer repairing, Cyber marketing	
Consultancy services	

(Source: MSME - Branch Development Institute, Karbi Anglong, Assam and Census, 2011)

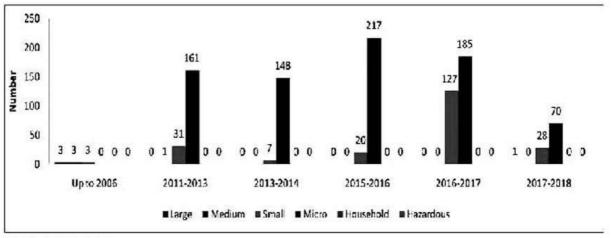


Figure 33 Industrial Aspects

(Source: MSME - Branch Development Institute, Karbi Anglong, Assam and Census, 2011)

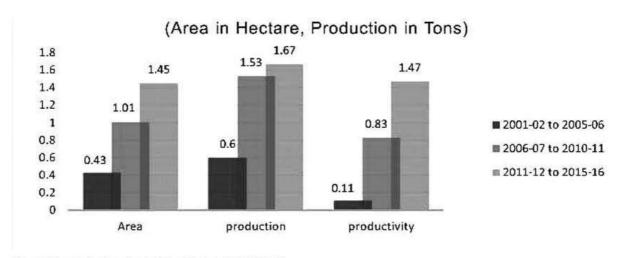


Figure 34 Area, Production and productivity of Tea Industry (2001-2016)

3.1.2.4 TeaIndustry

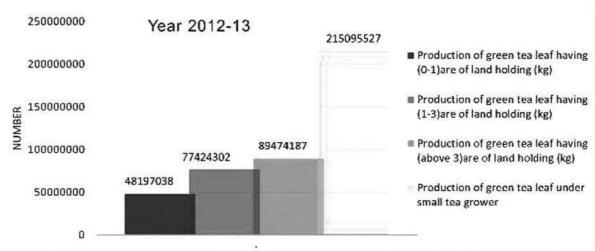


Figure 35 Development of Tea industry in Assam (2012-2013)

(Source: A Study on the Status of Growth and Development of Tea Industry in Assam)

3.1.3 TERTIARY SECTOR

3.1.3.1 Tourism

Rail, road and air connectivity coupled with the presence of large number of tourist spots in and around Dibrugarh city has seen impressive growth of tourism industry in this part of India in recent part. Dibrugarh has also become an important destination as well as a major transit point for tourists from both India and abroad. Such tourist circuits include - Dibrugarh - Roing - Mayudia - Anini Tourist Circuit, Dibrugarh - Guwahati river cruise besides 'Tea Tourism' for tourists who prefer serenity and novelty to the hustle-bustle of established tourist destinations.

Generally, the Manufacturing industries comes under Secondary sector, but in case of Dibrugarh, it comes under Primary Sector as it has major Oil and Tea industries, tourism aspects like tea tourism, golf tourism. And, Dibrugarh has the world's largest area covered by tea gardens. The entire district is surrounded by tea plantations and has a tea factory. Most of the rural population are in the occupation of rice, sugarcane, pulses and Pisciculture.

3.1.3.2 Trade

Dibrugarh attracts the Britishers with its natural wealth greatly. Large quantities of the products are exported from the various parts of the country and some even to the international markets. Tea is the most important commodity of export and earns considerable amount of foreign exchange. Dibrugarh is the second most important commercial town in upper Assam after Tinsukia. Most of the trading activities related to packaging and distribution of tea within the country and abroad are done here. Although there are a number commercial establishment existing in the heart of the town but there is no organized market within the planning area. As per the draft master plan there are around 9,000 commercial establishments in and around Dibrugarh town. Socio-economic surveys conducted in the town show a major chunk of the population engaged in trade, commerce, and office work.

Plywood is very important commodity of export and plays a significant role in the economy of the country. The other products exported are timber products, cane products, tea chests and other miscellaneous products of small-scale industries.

established in the recent years. The main imported articles are rice, wheat, pulses, grain, peas, groundnuts, spices, all kinds of edible oils, onion, garlic, sugar, other chemical fertilizers, cement, C.I. sheet, iron materials, paints, tube-well pumps and pipes, cycles, motor cars machineries required for major and small scale industries, clothes and garments. Bulk of wholesale trade is concentrated in the town of Dibrugarh.

3.1.3.3 Tourism, Hotels and Restaurants

Renowned as the "Tea City of India", Dibrugarh has been a popular travel destination of Assam for decades at a stretch. Along with tourism development, Dibrugarh is one of the major cities of India with massive growth in communication and industrial sector. Its economy thrives on 3 booming business: tea, oil and tourism.

With several tourist attractions, religious as well as spiritual in Dibrugarh, one has the chance to enhance his cultural knowledge and experience its beautiful heritage and landscapes. Amongst the many top things to do in Dibrugarh, tourists find visiting the tea gardens to be the most appealing. Given below is the worth watching sites in/around the city:

Table 55 Tourist Spots in the city

SI. No.	Tourist Spots	Details
1	Jokai Botanical garden cum Germplasm Centre	It is spread over an area of 1.2 Hectares amidst Jokai Reserve Forest and is 12 km from Dibrugarh town on Mancotta- Khamtighat road.
2	Radha Krishna Temple	The temple situated in a sprawling campus near the Assam Medical College, features two life size idols of Lord Krishna and Goddess Radha. The temple is considered to be an achievement marvel and is entirely made of marble stone.
3	Mahatma Gandhi Park	Situated at Khanikar, 10 km south of Dibrugarh city centre, the newly developed park is on a 22 Bigha plot of land.
4	Namphake Village	At a distance of about 37 km from the town, on the bank of the river Buridhing, is the Namphake village. A very beautiful Buddhist monastery is located in this area. The other attractions are Nong Mungchiringta (Musulinda tank Ashoka Pillar, Pagoda and traditional still houses.
5	Maijan Lake	It's a beautiful lake in the outskirts of Dibrugarh town, near Brahmaputra river.
6	Jagannath Temple	A replica of Lord Jagannath Temple at Puri is being constructed at Khanikar area in the city. Most of the workers were from Odisha and hence devotees of Lord Jagannath.
7	Mancotta Tea Estate Garden	A tea estate with a heritage bungalow to enjoy the tea plantations. Situated at 4 km away from Dibrugarh railway station; 20 km from Dibrugarh airport.
8	Bogibeel Bridge	It is the longest rail-cum-road bridge in India measuring 4.94 km over the Brahmaputra river and is a combined road and rail bridge. Situated 17 km downstream of Dibrugarh and Dhemaji, spans the Brahmaputra river and will connect the town of Dibrugarh in the south to Dhemaji to the river's north.

(Source: Domestic Tourism, Assam, Ministry of Tourism)

As per Survey in Tourism statistics in Assam, total number of visitors in Dibrugarh is 1,15,000 (approx.), out of which 400 are foreign visitors. It is one of the highest when compared with other cities of the state, namely, Jorhat, Majuli and Tinsukia. The tourists majorly visit Dibrugarh due to its scenic beauty and rich cultural heritage; predominantly, tea estates and national parks. The problems are listed below:

Table 56 Tourism problems with solution

Problems	Solutions
Lack of Awareness A large percentage of tourists found the tourist attractions not interesting.	To develop a proper website, that enables to give enough information to domestic and foreign tourists.
Lack of Skilled Manpower Majority of the visitors found shopping facilities inadequate.	To involve tribal youth to showcase the art, culture, heritage and livelihood.

The city of Dibrugarh is emerging as a popular destination for business and leisure trips for tourists from India and abroad.

Table 57 Hotels and Resorts in Dibrugarh

Hotels	Resorts/Homestays/Lodge/Hostel				
Hotel Natraj Hotel Rajawas Hotel Tea County Hotel Rainbow Regis	4 Star	Mancotta Chang Resort Located on the edge of Mancotta tea estate, Mancotta Chang is a 157-year-old colonial style bungalow, turned into a commercial accommodation. Situated at 4 km away from Dibrugarh railway station: 20 km from Dibrugarh airport. Mayflower Resort			
The Regency Hotel Little Palace Hotel Raj Palace Prashanti Tourist Lodge Hotel Prince Hotel Khyati Hotel Padma Palace Tulip Residency	3 Star	Homestay by the Tea Garden It is an upscale property, situated in Seujpur, the greenest neighbourhood of Dibrugarh. The host, Nishiraj Baruah, is a well-travelled lifestyle journalist and it is just 10-15 minutes away from Assam Medical College and Main Bazaar. Namphake Buddhist Monastery Homestay Nikki's Homestay. Bhaskar Homestay. Tanay's Dibrugarh Residency.			
Hotel Vishal Hotel Manas Dibrugarh Club House Hotel Maurya Hotel Raj Hotel East End Hotel Devika Hotel Monalisa Hotel Varsa Hotel J. S. Tower	2 Star	Gauri Lodge Hotel Shri Surya Hotel Amit Hotel Sagar Goswami Guest House Kangaroo Guest House			

(Source: Domestic Tourism, Assam, Ministry of Tourism)



Table 58 Restaurants in Dibrugath

SI. No.	Name of Restaurant	Type of outlet	Veg/Non-veg		
1	Hotel Garden Treat				
2	Oink Infinity				
3	Zafrans restaurant				
4	Food Infinity				
5	Dibarur Akhal	Family-friendly, Indian cuisine restaurant			
6	Gulmohar				
7	MFC				
8	Yolo				
9	Spice Fusion	Chinese cuisine restaurant			
10	Tripti Fast Food				
11	Yummy Grilled	Fast Food			
12	Domino's Pizza				
13	El Dorado		Both		
14	H2O The Restro Bar				
15	Studio 69	Bar and Restaurant			
16	Dreamland Bar				
17	MB's Sweet and Snacks		7		
18	Let's Go Sweet Shop	Sweets and Snacks			
19	Chiphoong	-			
20	Tai Ethnic Kitchen	Ethnic restaurant			
21	Chawla Dillivala	North Indian cuisine restaurant			
22	Moti Mahal Delux Tandoori Trail				
23	Chakhum	Indian cuisine restaurant			
24	Fusion Asiana				
25	De Rock Cafe	S. t.	1		
	Kas Cafe and Restaurant	Cafe	V		
27	The Fat Belly Cafe and Restaurant		Veg		
28	Eat Repeat	Family-friendly, Indian cuisine restaurant			

(Source: Domestic Tourism, Assam, Ministry of Tourism)

3.1.3.4 Transport, Storage and Communication

Being the gateway to Arunachal Pradesh, Dibrugarh district is well connected with the other parts of the state by road, air and rail. The State Transport buses as well as private buses ply regularly in the roads of the district carrying passengers to and from all important places with state and district headquarters. It also possesses a developed waterway transportation system along and across the Brahmaputra River, known as the National Waterway 2 which runs internally in the state.

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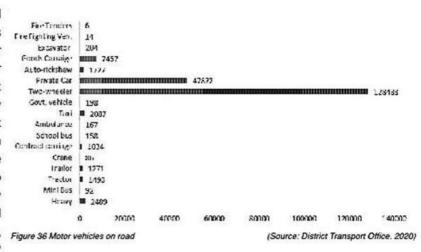


Table 59 Passenger and Goods carried by National Waterway 2 in Dibrugarh city

SI. No.	Name of Ferry Service	Revenue (in Rs.)	Passengers (in Nos.)	Goods (in QTs)
1	Dibrugarh-Majorbari	4,05,270	71,160	780
2	Dibrugarh - Panbari	1,94,200	4,648	

(Source: Statistical Handbook Assam, 2016)

Table 60 Passenger and Goods carried by National Waterway 2 nearby Dibrugarh city

SI. No.	Name of Ferry Service	Revenue (in Rs.)	Passengers (in Nos.)	Goods (in QTs)
1	Desangmukh-Matmora	2,78,536	40,680	7,200
2	Dikhow-Phulani-Salmora	56,160	6,120	-
3	Sadia-Saikhowa	50,00,000	3,97,512	87,876
4	Bogibeel-Karengbali	1,61,50,430	6,62,976	-
5	Dibru-Kachari-Oriumghat	410215	10896	1068
6	Borgibeel - Sissi - Kalghar	131640	9888	-
7	Saikhowa - Puglam	82684	13728	1512
8	Guijan - Borghuli	330870	41484	-
9	Luhit Ferry	335330	43200	-
10	Ghagor Ferry	455654	125640	1032

(Source: Statistical Handbook Assam, 2016)

One very old Food Corporation of India (FCI) godown is located just near to the New railway station and being utilised for Govt. grocery storage for public distribution. One DBRG railway goods yard is located in New Railway station premises for the daily import and export supply in Domestic freight. Dibrugarh Airport consist its own warehouse for storage of goods and daily courier services. Royal Paradise Bonded warehouse is a privately owned warehouse located on Nh-37- Convoy road junction.

Being a nerve centre of communication, industry and healthcare in Assam after Guwahati, Dibrugarh has well established information and broadcasting network. Dibrugarh has a full-fledged All India Radio Centre, commissioned in 1968. The station has its studios located at Malakhubosa in Dibrugarh and the transmission tower located at Lepetkata near the present BCPL. The Dooradarshan Kendra was established in the city in the year 1993. Earlier the Kendra used to telecast Assamese language programme capsuled in Guwahati beginning from 1991. It is contributing programmes to the "DD North East" channel. Moreover, NETV is a channel operating from Dibrugarh with a Zonal Office besides V&S, Dibru Live and Luit View are cable TV channels from Dibrugarh. Dibrugarh also has a digital cable TV network.

People of Dibrugarh are well-connected with primary mode of communication like mobiles, wire line phones, P.C.O and Wi-Fi connection. Rural Telephone Connection and Village Covered by public telephone are connected in the rural areas. Secondary mode includes post offices and logistics. Newspapers are majorly published in Assamese and other languages are also significant.

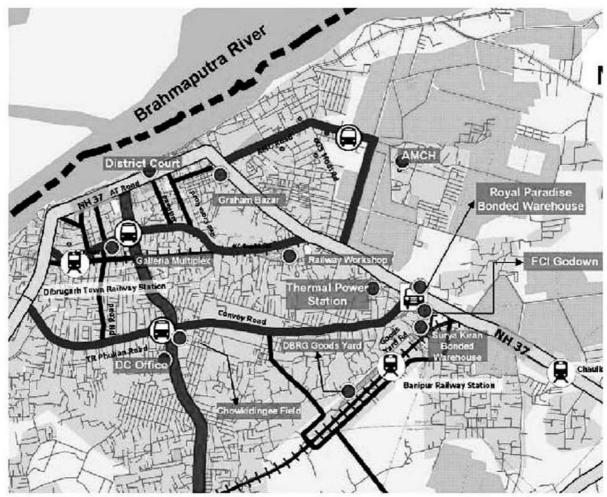


Figure Post office data of Dibrugarh district (Urban regions)

Table 61 Post office data of Dibrugarh district (Urban regions)

SI. No.	No. of Post Office	Area served per Post Office (in sq. km.)	Population served per Post Office
1	24	1.90	10,155

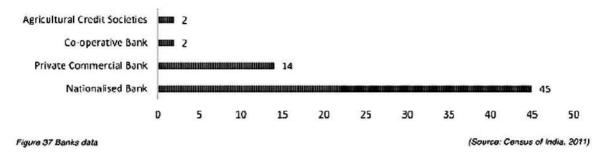
(Source: Statistical Handbook Assam, 2016)

3.1.3.5 Print Media

Dibrugarh has been a pioneer of newspaper journalism in entire Eastern India with the "Times of Assam" being the first newspaper published from Dibrugarh in the late 19th century. After four decades of publication, it ceased to publish and from 1939 "The Assam Tribune" started its journey from Dibrugarh, which after 7 years of publication got shifted to Guwahati. However, this premier English daily of the North-East India is published from Dibrugarh along with Guwahati and The Sentinel is published from Dibrugarh along with four other cities of North East India. Several vernacular, as well English, and Bengali dailies are published from Dibrugarh. Assamese newspapers published from Dibrugarh are Asomiya Pratidin, Janasadharan, Niyamiya Barta, Dainik Asom and Pratibimba. Jugashangkha is a Bengali daily published from Dibrugarh along with Guwahati and Silchar.

3.1.3.6 Banking

With the expansion of the tea industry and oil industry, several banks have been set up in various parts of the city. In addition, co-operative credit societies are also in operation but there are no Non-agricultural Credit Societies. However, even now also, the moneylender continues to be an important source of rural credit. The following graph explains the number of banks in the city:



3.1.3.7 Public Administration

The Dibrugarh Municipal Board is one of the oldest municipalities in North East India, established in 1873. The city since then has become an important nerve centre of political, administrative, cultural and commercial activities of a vast region comprising entire eastern Assam, Arunachal Pradesh and Nagaland. The area of the Municipal Board is 15.5 sq. km. There are 22 wards in the city, among them Dibrugarh Ward No. 22 is the most populous ward with population of about 13 thousand and Dibrugarh Ward No. 11 is the least populous ward with population of 1934.

The Deputy Commissioner of the District is the overall in charge of the administration of the entire district. Several Officers, like Additional Deputy Commissioners, Sub-divisional Officers, Extra Assistant Commissioners, and others assist the Deputy Commissioner is looking after the administration of the district. At lower level each sub-division is headed by one Sub Divisional Officer whereas under him there will be Revenue Circle Officers who are responsible for the entire administration of their respective revenue circle. Directorate of Town and Country Planning implemented the first master plan of Dibrugarh town in 1977.

3.2 INFORMAL SECTOR

The informal sector, is the part of any economy that is neither taxed nor monitored by any form of government, which is part of a country's economy that is not recognized as normal income sources. People who work in the informal sector do not declare their income and pay no taxes on them.

Mainly the roads, footpaths are encroached by the vendors in the town. But there are markets and small bazaar which includes Tibetan Market, Dibrugarh University Market Complex, Chowkidingee, Paltan Bazar, Naliapool, Khalil Market to name a few. These markets are on daily and weekly basis. It includes food stalls, grocery, green grocers, meat vendors, cheap cosmetics stalls, etc.



3.3 EMPLOYMENT

3.3.1 OCCUPATIONAL PATTERN

Employment is one of the key indicators in determining the purchase power and social status of a community. According to census 2011, the majority of the working population (80%) is engaged in tertiary sector which include tourism, trade & commerce, transport, communication and services etc. This can be attributed to the reduction in agricultural land, higher income employment opportunities and urbanization of the planning area.

Year	Population	Total workers	WFPR	Primary	%	Secondary	%	Tertiary	%
2001	121893	40216	33.0	206	0.5	847	2.1	39163	97.4
2011	139565	52986	38.0	614	1.2	1361	2.6	51011	96.3

Table 62 Sector wise workforce participation ratio in Dibrugarh MB area

(Source: Census of India 2001, 2011)

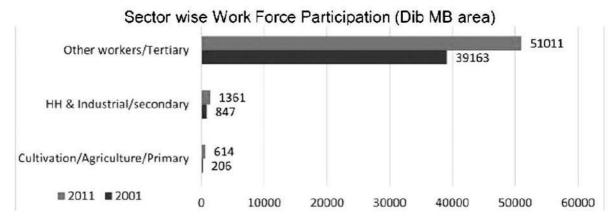


Figure 38 Sector wise distribution of workers in Dibrugarh MB area

As per census 2011, the workers are classified into three categories Primary (agricultural cultivators, agricultural labourers), Secondary (household industrial workers) and Tertiary (other workers). In Dibrugarh MB area, the distribution of economic base into type of sector namely primary sector, secondary sector & tertiary sector are imperative to provide a guideline for the development of entire planning area and creation of potential centers of development. It is evident from the Figure 38 that engagement in tertiary sector is higher since 2001, at the cost of primary sector in Municipal area. This can be attributed to the reduction in agricultural land, higher income employment opportunities and urbanization of the municipal planning area. According to census 2011, the majority of the working population (96.3%) is engaged in tertiary sector which include tourism, trade & commerce, transport, communication, and services etc. Figure 38 also reveals that an increasing trend has been observed in the primary sector (0.5% to 1.2%) during the year 2001-2011 respectively in the system. Further it has been observed that there is decreasing trend in the tertiary sector during the same period from (97.4% to 96.3%). It can be concluded from the above analysis that the tertiary sector is the major contribution in the economic growth and development of the Dibrugarh Municipal Planning Area.

The trend of the higher numbers in the employment in tertiary sector is indicative of the engagement of workers mainly in the service sector. There is need to balance this transformation into tertiary sector as well as primary sector for balanced economic development.

3.3.2 WORKFORCE PARTICIPATION IN GIS BASED MASTER PLAN AREA

The details of workforce participation of Dibrugarh Planning Area for year 2011 is presented in the table 63.

Table 63 Work force participation rate of Master Plan area

SI. No.	Name of Area	Population	Total Worker	Non- Worker	% of Worker in total population	% of Non- Worker in total population
1	Dibrugarh Municipal Board	139565	52986	86579	37.96	62.04
2	OG & CT	14731	5247	9484	35.62	64.38
3	13 Semi-Urbanised villages	31207	11630	19577	37.27	62.73
4	53 villages of Dibrugarh East Revenue Circle	75921	31135	44786	41	59
5	115 villages of Dibrugarh West Circle	99518	42903	56615	43.11	56.89
6	2 villages of Moran Circle	455	285	170	62.64	37.36
	Total	361397	144186	217211	39.90%	60.10%

(Source: Census of India, 2011)

The table 63 reveals that the workforce participation rate (WPR) for the planning area for year 2011 is 39.90%. The higher number of workers for the year 2011 is observed in Dibrugarh MB area, whereas the lower is observed in villages of Rural and Moran area.

The table also reveals that the workforce participation rate is almost equal in Dibrugarh Municipal Board and Semi-urban area in last decade. It is observed that the workforce participation rate in 2011 is less in Dibrugarh Municipal Board, Semi-urban and Outgrowth area compared to East, West and Moran area. Hence, the less participation rate, the more the tax base shrinks. It depresses economic growth.

3.3.3 WORKFORCE DISTRIBUTION

Workforce population distribution according to sectors are as mentioned below

3.3.3.1 Workforce distribution by type of workers

Table 64 Workforce distribution in planning area, 2011

SI. No.	Name of Area	Population 2011	Total Worker	Main Worker	%	Marginal Worker	%	Non- Worker	%
1	Dibrugarh Municipal Board	139565	52986	45684	32.73	7302	5.23	86579	62.03
2	OG & CT	14731	5247	4579	31.08	668	4.53	9484	64.38
3	13 Semi-Urbanised villages	31207	11630	9314	29.85	2316	7.42	19577	62.73
4	53 villages of Dibrugarh East Revenue Circle	75921	31135	22300	29.37	8835	11.64	44786	58.99
5	115 villages of Dibrugarh West Circle	99518	42903	25811	25.94	17092	17.17	56615	56.89
6	2 villages of Moran Circle	455	285	279	61.32	6	1.32	170	37.36
	Total	361397	144186	107967	29.87	36219	10.02	217211	60.10

(Source: Census of India, 2011)

The details of share of main, marginal and non-working population of the Dibrugarh Master Plan Area is furnished in the table 64. This table reveals that less than one third (29.87%) of the total population is main workers, very meagre (10.02%) falls under marginal workers and nearly two third (60.10%) is non-workers in Dibrugarh Planning Area. The Higher share of non-working population indicates that lack of employment opportunities/infrastructure is prevailing in the system. The higher number of main workers to the total population is in Dibrugarh MB area while the lower numbers in villages of rural and Moran circle. These phenomenon highlights that there is a shift from rural to urban migration i.e., Push effect from rural area was observed in the system during the year 2011.

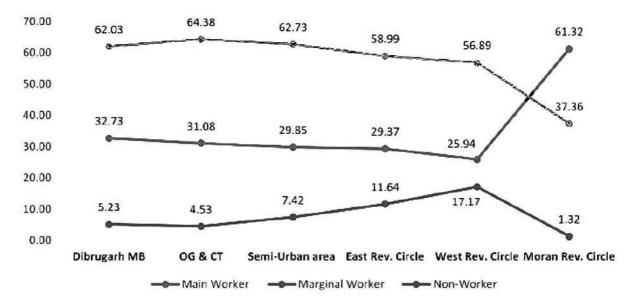


Figure 39 Workforce distribution by type of workers, 2011

3.3.3.2 Workforce distribution by sectors of economy

Table 65 Workforce Distribution by sectors of Economy (2011)

SI. No.	Name of Area	Population 2011	Total Worker	Primary Sector	%	Secondary Sector	%	Tertiary Sector	%
1	Dibrugarh MB	139565	52986	614	1.16	1361	2.57	51011	96.27
2	OG & CT	14731	5247	100	1.91	105	2.00	5042	96.09
3	13 Semi-Urban area	31207	11630	1619	13.92	304	2.61	9707	83.47
4	53 villages of East R.C.	75921	31135	5838	18.75	1012	3.25	24285	78.00
5	115 villages of West R.C.	99518	42903	18004	41.96	1221	2.85	23678	55.19
6	2 villages of Moran Circle	455	285	274	96.14	1	0.35	10	3.51
	Total	361397	144186	26449	18.34	4004	2.78	113733	78.88

(Source: Census of India, 2011)

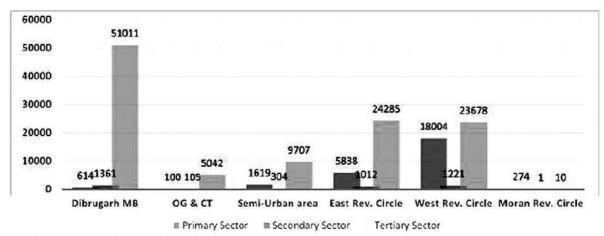


Figure 40 Sector wise wworkforce distribution of DMPA

The details of workforce distribution by sectors of economy are described in the table 65 reveals that out of the total working population of Dibrugarh Planning Area, 18.34 % work in the primary sector, very meagre (2.78%) in secondary sector and almost major (78.88%) in tertiary sector. This composition clearly indicates that there is a higher dependency of working population on tertiary sector, followed by primary sector. However, in rural areas, dependency on primary sector is moderate. Dibrugarh municipal board area is mainly dependent on tertiary sector as major commercial and activities are concentrated in and around the ward 16. As there are very less processing industrial establishments such as those that take the raw materials produced by the primary sector and process them into manufactured goods and products, the dependency on secondary sector is also very less.

3.3.4 EMPLOYMENT PROJECTIONS

3.3.4.1 Workforce Population projections for Dibrugarh Master Plan area

For workforce estimation the major concerns of the economic base are type of activity, employment rate, work force participation rate (WFPR), occupation structure etc. The overall development and opportunities in a town depend on the level of economic activities in an area.

The employment projection for working population for year 2045 is given in the table 66 below.

Year	Total Projected Population	Total working population	Growth Rate in Working Population	WFPR
1991	268842	83663	-	31.12
2001	305974	108988	30.27	35.62
2011	361397	144186	32.30	39.89
2021	417572	173454	20.30	41.53
2031	470719	202351	16.66	42.98
2041	527424	222687	14.60	42.22
2045	551757	232106	6.79	42.06

Table 66 Workforce projections of Dibrugarh Master Plan area for year 2045

(Source: Compiled by Consultant)

Considering the scenario that the Workforce Participation Rate (WPR) will increase as the Master Plan 2045 projects will be implemented and more job opportunities will be created, the employment projection is calculated. After consecutive discussions with various govt. departments, the employment projection is worked out based on the optimistic scenario. Thus, the workforce participation rate for year 2045 is coming around 42.06%, which was 39.89% in year 2011 as per Census 2011. The total projected working population in Dibrugarh Master Plan area for the horizon year 2045 is 232106.

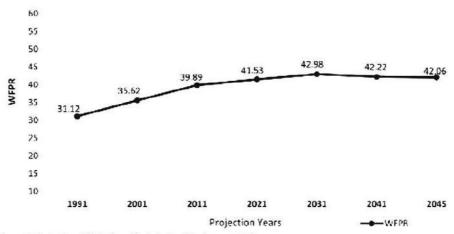


Figure 41 Projection of Work Force Participation Rate for year 2045

3.3.4.2 Sector wise projection of working population - 2045

For the year 2030 in Dibrugarh the total workforce projected is 1,59,714 out of which primary sector contributes to 92,511 which is about 57.9%, secondary sector contributes to 4367 of about 2.7% and about 62,836 of about 39.3% is contributed by tertiary sector. Sector wise Workforce Participation for different plan phases is indicated in the table below.

	200)1	20	11	202	21	20:	31	204	41	20	45
Activity	Work	ers	Wor	kers								
1950	No.	%										
Primary	1744	1.6	4023	2.79	9193	5.31	15581	7.72	35629	16.07	43636	18.82
Secondary	2365	2.17	2394	1.66	4510	2.6	5464	2.7	6013	2.7	6267	2.7
Tertiary	104879	96.23	137769	95.55	159578	92.09	181104	89.58	180821	81.23	181971	78.48
Total	108988	100	144186	100	173454	100	202351	100	222687	100	232106	100
WFPR	35.6	32	39.	89	41.5	3	42.	98	42.:	22	42.	.06

Table 67 Sector wise workforce population participation - 2045

(Source: Compiled by Consultant)

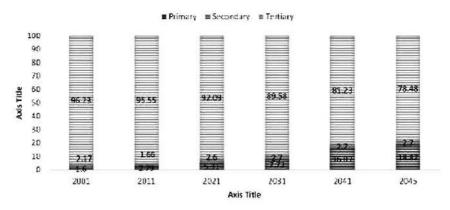


Figure 42 Sector wise workforce participation projection for year 2045

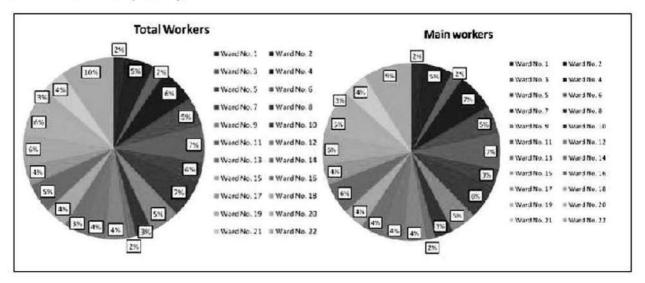
From the figure 42 it is observed that the working population in primary sector is gradually increased from year 2001 to 2011. From 2021 onwards the graph shows the steady growth in the primary working population due to the supporting policies for the agricultural sector. Beyond the policies, as a part of reducing the BPL population encouraging the active participation by the grass root level SHGs, farmers and labourers' forums would improve the relevance and the quality of the sector. In year 2045 the balance between primary and tertiary sector population seems to increase to satisfactory level.

Table 68 Ward wise workforce participation, 2011

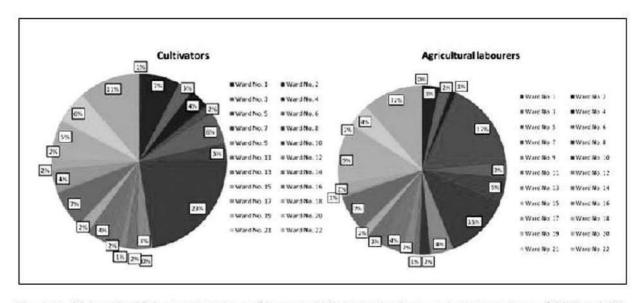
Word	M	Main workers	.13	Margi	ginal workers	Sers	ŏ	Other workers	er.	Τ̈́	Total workers	513	Z.	Non workers	ES.
arn	persons	mak	female	persons	malc	fenule	persons	Jem	female	persons	male	femak	persons	malc	fermole
1	726	208	155	88	25	13	955	708	153	1,000	832	168	2.032	669	1.333
2	2.472	2.031	441	057	249	101	2.433	2.000	433	2.833	2.280	543	5.152	1.775	3.377
m	975	754	22.1	209	26	112	960	745	215	1.184	851	333	2.191	206	1395
t	3,126	2.489	53.7	228	144	84	3,107	2.476	63.1	3.354	2,533	72.1	5.8.8	1.874	3944
8	2,311	1.712	óés	415	761	223	2,169	67.91	540	2,726	1,904	822	4,320	1.514	2806
9	3.0.6	2.379	53.7	186	3::	175	2.978	2.351	627	3.502	2,690	\$13	5.503	1.885	3.618
-1	1.50	1.222	279	416	396	120	1,454	86	256	1,917	1,518	360	3.297	1.106	191
8	2.824	2,400	424	703	388	315	2,726	2.339	387	3.527	2,788	739	4.9.9	1.562	3.357
6	2.134	1.966	158	619	346	273	2,100	1.934	166	2.753	2.312	44]	4.264	1.497	2,767
10	1.517	1.131	98	78	20	13	1.169	1.387	83	1.599	1.501	86	2,737	920	1.817
11	742	5.50	92	96	48	48	731	544	8.7	8.38	698	140	1.096	348	748
12	1.882	1.680	202	681	120	69	1.835	3897	197	2.071	1,800	27.1	3,300	1.020	2.280
13	1,94]	1.723	218	539	168	7.1	1.894	1.685	506	2.180	1.891	289	3.680	1.122	2.558
14	1.7:8	1117	274	123	69	56	8491	1.407	177	1.841	1.508	333	2.983	944	2039
15	1,796	1.431	385	280	09.	120	1.763	1.412	351	2,076	1,591	¥8†	3.327	1.130	2,197
16	2.626	2,407	219	219	158	61	2.585	2.375	210	2.845	2.555	280	4.574	1.923	2.651
1.7	1,707	1.508	199	159	101	52	1.682	1.490	192	1.866	1.615	251	3,763	1.300	2,463
18	2.598	2.128	170	\$CF	265	1.10	2542	2.088	151	3.003	2.393	610	5.681	2.045	3.639
19	2.3.7	922	173	46 £	477	320	2.265	1,744	52:	3,114	2,253	861	3,933	1.335	2,598
20	1,397	1.194	203	55	45	21	1363	160	203	1.452	1,239	213	2,755	857	1.898
21	2.054	1.660	394	17.7	75	47	2.016	1.640	376	2.176	1,735	44]	3.33]	1.083	2.248
22	1.068	3.539	675	1.073	218	324	3.856	3.357	199	5.140	1.287	853	7,920	2.765	5 1 54

3.3.5.1 Ward wise working population profile

According to Census of India, 2011, Ward no. 22 has the highest percentage i.e. 10% and 9% of total workers and main workers respectively.

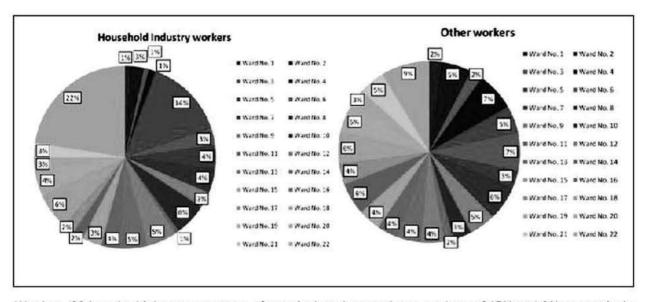


Ward no. 1, 3 and 11 have the lowest percentage i.e. 2% of total workers also main workers. Ward no. 8 has the highest percentage 23% of cultivators and ward no. 10 has no cultivator. In case of agricultural labourers, ward no. 5 has highest of 17% and ward no. 1 has none.

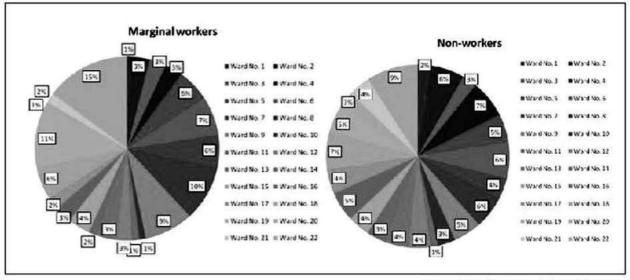


Ward no. 22 has the highest percentage of household industry workers and other workers of 22% and 9% respectively and ward no. 1, 3, 4% 11 have the lowest of 1%

in household industry workers, also ward 1, 3 & 11 have the lowest of 2% in other workers.



Ward no. 22 has the highest percentage of marginal workers and non-workers of 15% and 9% respectively. Ward no. 1, 10 & 11 have the lowest percentage of 1% of marginal workers and non-workers of 1% in ward no. 11.



(Source: District Census Handbook Dibrugarh, 2011)

3.3.6 WARD WISE OCCUPATIONAL CLASSIFICATION OF MAIN WORKERS, 2011

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occups
WYSe.
69 Ward
Table 69

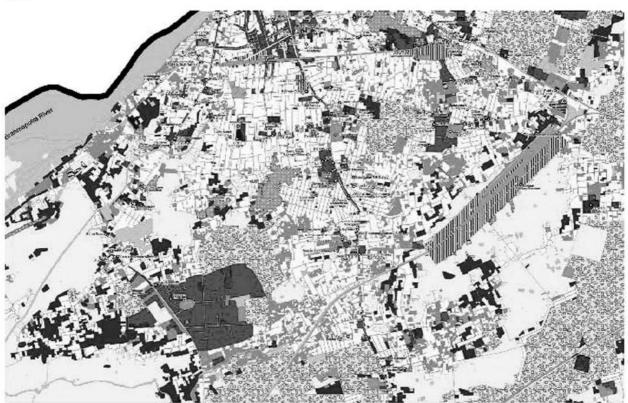
7	J	Cultivators	*S	Agricul	Agricultural labourers	ourers	Househo	old Industr	Household Industry workers	Ott	Other workers	ers
WALU	persons	alem	female	persons	male	female	suosaed	male	female	persons	male	female
1	1	0	-1	0	0	0	9	5	-	955	802	153
7	13	12	1	9	9	0	20	13	7	2.433	2.000	133
3	5	7	3	4	3	1	9	7	2	096	£45	215
4	7	4	3	7	ca	0	01	7	m	3.107	2.476	631
٧.	3	2	•	31	۲	16	108	99	42	2.169	1.629	540
9	11	Ĺ	4	5	17	I	22	11	V.	2.978	2,351	627
7	9	4	М	6	۲-	2	32	13	19	1.454	1.198	256
80	12	23	19	23	16	7	33	22	11	2.726	2.339	387
6	5	4		8	8	0	21	20	-	2.100	1.934	166
10	С	0	0	4	(C	1	44	41	n:	1,469	1.387	82
11	4	٤	1	7	0	2	5	3	2	731	644	87
12	2	7	0	4	st.	0	41	36	۷,	1.835	1.638	197
13	4	£	1	8	Ş	٤	35	30	w	1.894	1.685	509
14	8	Ĺ	-1	5	~	1	27	56	1	1.678	1.407	271
15	4	3	,	ę	r1	1	26	14	12	1.763	1.412	351
16	13	r.	9	13	17	-	1.5	13	n	2.585	2.375	210
17	8	9	7	1	I	0	91	11	y.	1.682	1.490	192
18	4	3	1	4	4	0	48	33	15	2.542	2.088	454
19	V	3	1	<u>1</u> 1	14	3	31	12	16	2.265	1.744	521
20	6	6	0	V	ζ,	0	21	21	0	1.363	1.160	203
21	11	ż	4	8	۲۰	1	61	9	13	2.016	1.640	376
22	21	Ξ	10	21	1	1~	170	157	۲	3.856	2 357	400

(Source: Census of India, 2011)

4 EXISTING LANDUSE ANALYSIS-2020

Land is the habitat of men, and its wide use is crucial for the economic, social, and environmental advancement of all countries. Land is partitioned for administrative and economic purposes, and it is used and transformed in a myriad way. Land use is the use of land made by man. It is broad and important term used to classify land according to its use. Land use is commonly used to refer the spatial distribution of functions in each area. The study of land use holds a very significant place where a particular settlement can be recognized as a town depends on its functional structure. The functional activity can be regarded as the main regions for the growth of an urban centre. The main purpose of land use study is to provide framework for the development of a particular area. It gives us an idea about the proportion of various types of land. Landuse give an accurate picture of an urban area which is having a great significance for future planning. The main purpose of land use classification is to provide framework for the development of a particular area. The need for studying the land use aspect is elaborated as follows: To know the arrangement of various parts of town put to different uses such as residential, commercial, industrial etc. To provide standardize distribution of land use. Land use study provides the framework for the development of a particular area and direction of development. It gives us an idea about the proportion of various types of use of land.

As part of the preparation of GIS Based Master Plan - 2045, an extensive existing land use survey was carried out for the entire Dibrugarh Planning Area. The Existing Land Use was updated based on ground reality on the scientific base map prepared with the help of Satellite Image and Revenue records like village level cadastral sheets, Field Measurement Book sheets and Town Survey Sheets. The Dibrugarh Planning Area is administratively divided into two entities, Urban and Rural. Urban area comprises Municipal Board area, 2 Census Towns and 2 Out Growths, and Rural comprises 183 Villages. This chapter presents the existing landuse analysis, 2020 for urban, rural and overall planning area. Further the existing land use analysis of the proposed conurbation area is also discussed to understand the current scenario of the new conurbation area.



4.1 EXISTING CONURBATION AREA

The Conurbation area is a continuous urban area comprising of towns and their outgrowths merged with each other due to physical expansion and population growth. In the case of Dibrugarh, conurbation area includes one municipality area namely Dibrugarh Municipal Board, 2 Census Towns (Niz-Mancotta and Barabari AMC area) and 2 Outgrowth area (Mohpuwalimora Gohain Gaon and Tekela Chiring Gaon). The total Conurbation area is 24.04 sq.km, out of which DMB comprise 15.50 sq.km whereas OG and CTs comprises 8.54 sq.km. area. The detailed existing land use analysis of conurbation is presented in table 71. DMB is bound by Brahmaputra River & Tekela Chiring (OG) on the North-west, Barbari AMC (CT) & Bangal Gaon the western side and Niz-Mancotta and Bairagimath Kachari gaon on the southern side.

SI. No.	Description	Details
1	Area	24.04 sq.km.
2	Gross Density	6418 person / square km. (64 pph)
3	Net Density	16241 person / square km (162 pph)
4	Loaction	City Centre
5	Major Landmarks	Dibrugarh railway Station, Gallaria Multiplex, Graham Bazar, Paltan Bazar, Assam Medical Collage and Hospital, Cantonment, New Market, Chowkidingee Field, Police reserve, District Court, District Jail, FCI Godown

Table 70 Details of Dibrugarh Conurbation

One of the predominant Landmark in the DMB is the New Market Area which lies in the centre of the DMB area. City's major commercial activities lies along the RKB Road, HS Road, Cole Road, Babulal Poddar Road and New Market Road. Another major landmark in this precinct is Lakshminath Bezbaruah Park which is a recreational site for the local as well as floating population. Dibrugarh Railway station, Chowkidingee Field, Big Bazar, Paltan Bazar, Naliapool and Tibetan Market are also other major landmarks located in DMB area.

The existing land use analysis chart for urban area - 2020 is presented in figure 43. In urban area, 9.50 sq.km of land is under residential use and it is the predominant land use in this region. Traffic & Transportation land use occupies 1.24 sq.km of area in urban area. Vacant land use is around 0.80 sq.km and Waterbody is 2.74 sq.km, agricultural land use is 2.23 sq.km of the urban area. The Public & Semi-Public land use covers 0.26 sq.km in the urban area. The commercial land use in the urban area is occupying 0.66 sq.km, mixed landuse is 0.20 and industrial landuse is observed 0.25 sq.km. The Existing land use Map - 2020 for the entire urban area is illustrated in figure 43.

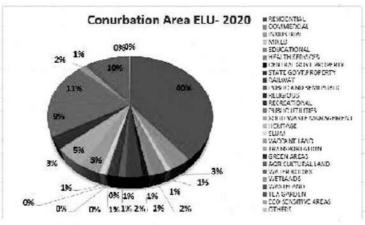
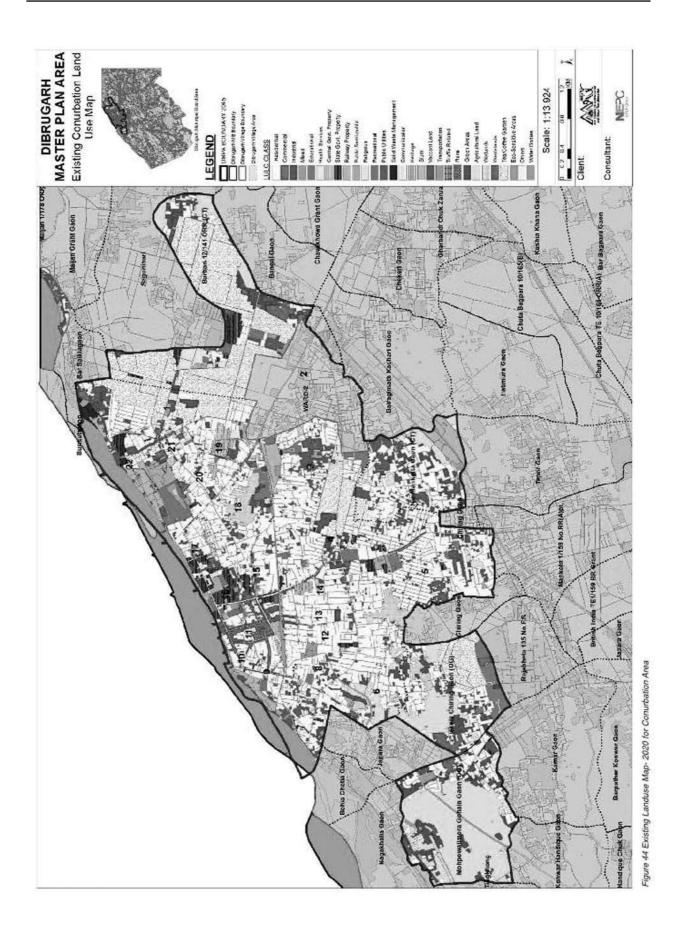


Figure 43 Existing Landuse Analysis of Conurbation area

Table 71 Existing Land Use Analysis of Conurbation Area - 2020

SI. No.	Landuse Types	Area (Sq Km)	Percentage Area (%
1	Residential	9.50	39.52
2	Commercial	0.66	2.75
3	Industrial	0.25	1.04
4	Mixed	0.20	0.83
5	Educational	0.50	2.08
6	Health Services	0.20	0.83
7	Central Govt.Property	0.20	0.83
8	State Govt.Property	0.50	2.08
9	Railway	0.20	0.83
10	Public And Semi Public	0.26	1.08
11	Religious	0.09	0.36
12	Recreational	0.35	1.46
13	Public Utilities	0,02	80.0
14	Solid Waste Management	0.05	0.21
15	Heritage	0.01	0.02
16	Slum	0.24	1.00
17	Vaccant Land	0.80	3.33
18	Transportation	1.24	5.16
19	Green Areas	0.75	3.12
20	Agricultural Land	2.23	9.28
21	Water Bodies	2.74	11.40
22	Wetlands	0.43	1.79
23	Wasteland	0.30	1.25
24	Tea Garden	2.30	9.57
25	Others	0.03	0.12
	Total	24.04	100





4.1.1 RESIDENTIAL

The residential land use is the predominant use in urban area and it covers 9.50 sq km of area which is around 39.52 % of the total area of the Conurbation area. Residential use is dominant on the Southern and central part of the Dibrugarh town and it is one of the oldest residential settlement within the Dibrugarh Municipality. Other major settlement contributing to the residential use in the urban area are Borpukuripar, Bushnu nagar, Santipara, Naliapool and Chiring Chapori which are major residential area in this municipality. Tekela Chiring and Barbari are other revenue villages contributing to the residential land use.

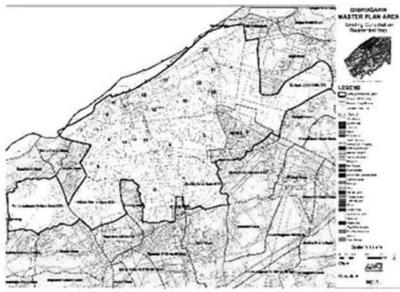


Figure 45 Residential Land Use - Conurbation

4.1.2 COMMERCIAL

The commercial land use in the urban area accounts to 2.75% (0.66 sq.km.) of the total area of the Conurbation. The CBD of the Dibrugarh region is the major contributor for the commercial land use in this Municipality. Other than the CBD, commercial land use is observed in the central part of the Dibrugarh town which is the Thana Chariali and Chowkidingee junction surrounding area. Predominant commercial use is found on both the sides of New Market Street, HS Road within the Dibrugarh Municipality.



Figure 46 Existing Commercial Land use - Conurbation

4.1.3 INDUSTRIAL

The Industrial Landuse covers around 0.25 sq.km of the Urban area which accounts to 1.04% of the total area of the conurbation. Out of this, major portion is under Sessa Tea Estate Mill which is currently functional and this provides an opportunity for earmarking these land parcels for public uses like recreational or for development of urban forestry.

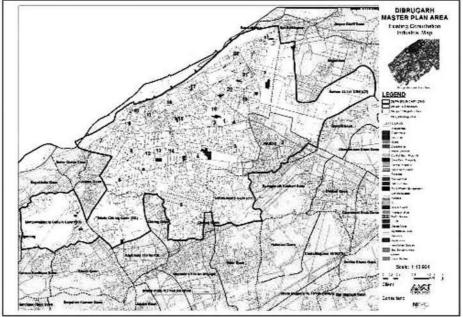


Figure 47 Existing Industrial Land use - Conurbation

4.1.4 PUBLIC & SEMI-PUBLIC

The Public & Semi-public Landuse in the urban area is about 0.26 sq.km which is around 1.08 % of the total area of the Conurbation. The Dibrugarh town accommodates several government offices like DC Office, Cantonment, District Court, Circuit House, Central Govt. office, Department of Revenue, Public Works Department, Health, University, Railway, Education Institute etc. Further, it has been observed that there are good number of religious buildings like Temples, Churches & Mosques which contributes to the Public & Semi-Public landuse of the Conurbation area.

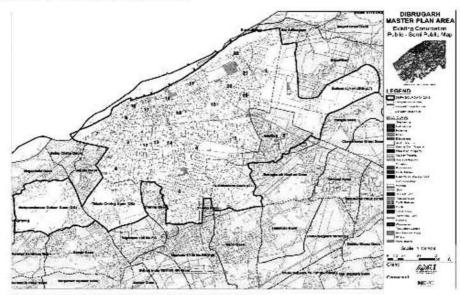


Figure 48 Existing Public and Semi-Public Land use - Conurbation

4.1.5 OPEN SPACES

The recreational land use within the urban area accounts to 0.35 sq.km which is around 1.46% of the total area of the Conurbation. The important recreational sites within this area are Lakshminath Bezbarua Park in northern part of Town, Chowkidingee field, situated in the city centre side of the dibrugarh town, Shishu Udhyan, located on the southern side of the Town adjacent to the Deputy Commissioner's Office.

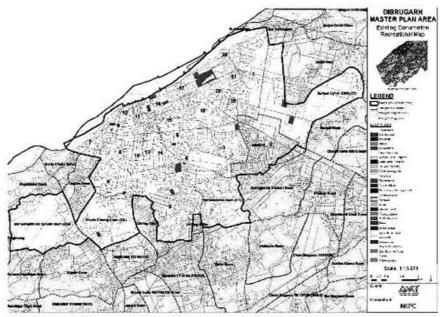


Figure 49 Existing Recreational Land Use - Conurbation

4.1.6 TRAFFIC & TRANSPORTATION

Traffic & Transportation covers 1.24 sq.km which is around 5.16 % of the total area of Conurbation. Large land parcels coming under the traffic & transportation land use in this region are Railway Station and ASTC bus stand. Major roads within the urban area are Mancotta road, Convoy Road and NH-37 etc.

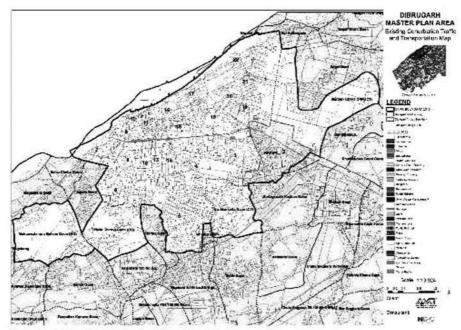


Figure 50 Existing Transportation Land Use - Conurbation

4.1.7 VACANT

In urban region around 0.80 Sq.km of land is vacant as on year 2020, which accounts for 3.33% land of the total area. Major vacant parcels are located in the revenue villages of Niz Mancatta Gaon, Chiring Gaon, Barbari & Mohpowalimora Gaon. In these villages, a lot of land is developed into layouts and are currently lying vacant. These lands can be utilized for addressing the future needs of the planning area for the plan period.

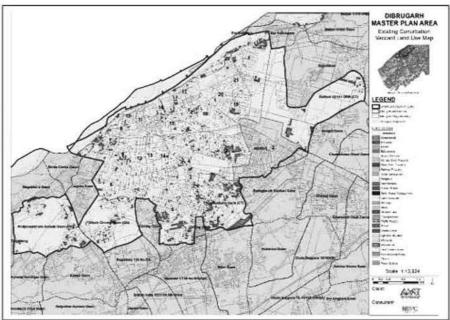


Figure 51 Existing Vacant Land Use - Conurbation

4.1.8 PROTECTED & UNDEVELOPABLE USE

Dibrugarh urban area has 4.17 sq km of area falling under protected and undevelopable land use zone. Majority of the area falling under this category is covered by wetlands and Brahmaputra river bed.

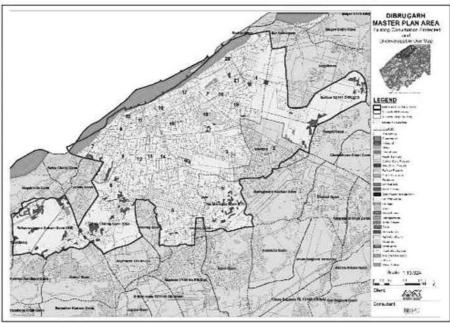


Figure 52 Existing Undevelopable Land Use- Conurbation

4.2 EXISTING RURAL AREA

Dibrugarh Planning Area accommodates total 183 villages as rural area. The total area covered by rural region is 343.89 sq.km. The rural area is divided into three land pockets 13 Semi urbanize villages, 53 villages from Dibrugarh East, 115 villages from Dibrugarh West and 2 villages from Moran. The detailed existing land use analysis of Dibrugarh Rural Area - 2020 is presented in table 72.

SI. No.	Description	Details
1	Area	363.95 sq.km.
2	Gross Density	569 person / square km. (6 pph)
3	Net Density	4502 person / square km. (45 pph)
4	Location	South and East of City Centre
5	Major Landmarks	Jagannath Temple, Khanikar Park, Jokai Reserve Forest, Botanical Garden, Sessa Tea Estate, Police reserve, Airport

Table 72 Details of Rural Area

One of the predominant Landmark in the rural Dibrugarh is the Jagannath Temple which lies on Dibrugarh Bypass Road in Chota Bogpar village. Khanikar park and Police reserve are also important landmark located in Khanikar village. Botanical garden in Jokai Reserve Forest area is a major attraction which is surrounded by Harak pather and Kalyani Na-gaon. Sessa and Jalan Tea estates are well known landholders in rural agriculture area.

The existing land use analysis chart for Rural area - 2020 is presented in figure 53. In rural area, 141.12 sq.km of land is under Agricultural use and it is the predominant land use in this region.

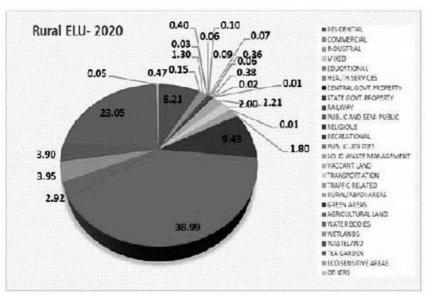


Figure 53 Existing Land Use Analysis - 2020, Rural Area

Tea gardens occupies 83.42 sq.km area and Tree clad and Green area covers 34.15 sq.km of area. Residential area occupies 29.70 sq.km of land and Industrial land use occupies 4.70 sq.km of area in rural area. Wetland covers 14.30 sq.km, Waterbody occupies 12.52 sq.km area and Vacant land use is around 8 sq.km. Commercial land use is 0.53 sq.km of the rural area. The Public & Semi-Public land use covers 1.29 sq.km in the rural area. The Mixed land use is 0.10 sq.km and recreational land use is observed 1.36 sq.km. The existing land use Map - 2020 for the entire rural area is illustrated in figure 54.

Table 73 Existing Land use Analysis for Rural Dibrugarh - 2020

SI. No.	Landuse Type	Area (Sq Km)	Percentage (%)
1	Residential	29.70	8.21
2	Commercial	0.53	0.15
3	Industrial	4.70	1.30
4	Mixed	0.10	0.03
5	Educational	1.44	0.40
6	Health Services	0.20	0.06
7	Central Govt.Property*	0.36	0.10
8	State Govt.Property	0.34	0.09
9	Railway	0.26	0.07
10	Public and Semi Public	1.29	0.36
11	Religious	0.20	0.06
12	Recreational	1.36	0.38
13	Public Utilities	0.09	0.02
14	Solid Waste Management	0.03	0.01
15	Vaccant Land	8.00	2.21
16	Transportation	7.25	2.00
17	Traffic Related	0.03	0.01
18	Rural/Abadi Areas	6.52	1.80
19	Green Areas	34.15	9.43
20	Agricultural Land	141.12	38.99
21	Water Bodies	12.58	2.92
22	Wetlands	14.30	3.95
23	Wasteland	14.10	3.90
24	Tea Garden	83.42	23.05
25	Eco Sensitive Areas	0.18	0.05
26	Others	1.70	0.47
	Total	363.95	100

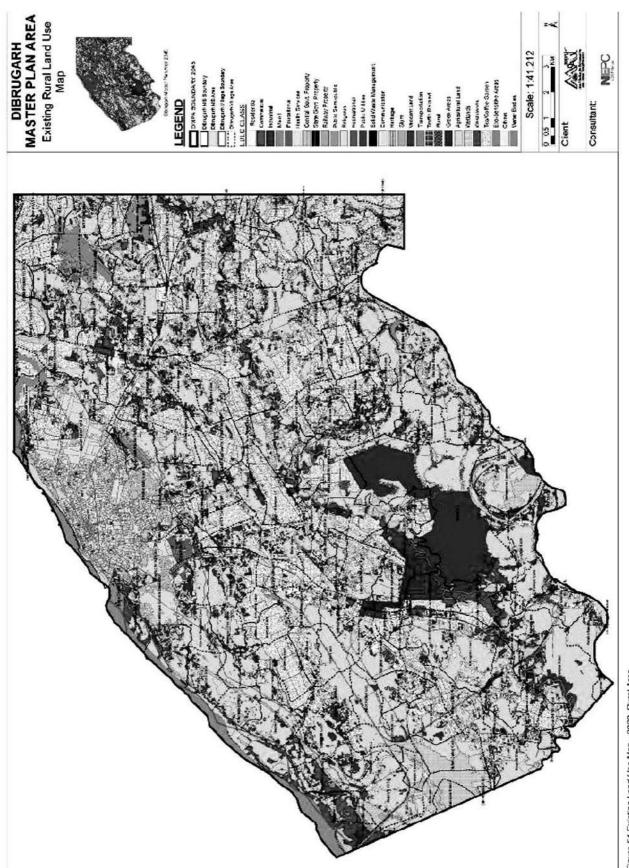


Figure 54 Existing Land Use Map - 2020, Rural Area

4.2.1 RESIDENTIAL

The residential land use is the predominant use in rural area and it covers 29.70 sq km of area which is around 8.21 % of the total area of the rural Dibrugarh. Residential use is dominant on the Southern-west side and east part of the DMPA.

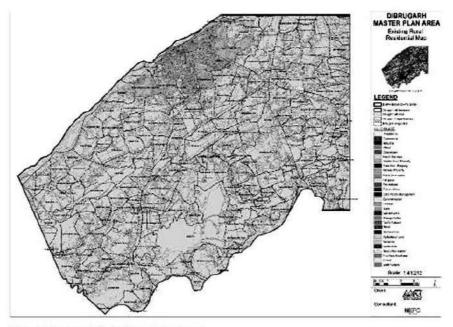


Figure 55 Existing Residential Landuse - Rural area

4.2.2 COMMERCIAL

The commercial land use in the rural Dibrugarh accounts to 0.15% (0.85 sq.km.) of the total area of the villages.

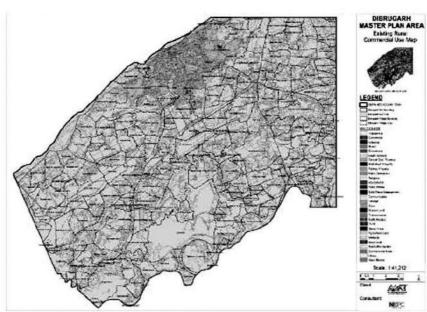


Figure 56 Existing Commertial Landuse - Rural area

4.2.3 INDUSTRIAL

The Industrial Landuse covers around 4.70 sq.km of the rural area which accounts to 1.30% of the total area of the Villages. Out of this, major portion is under BCPL industries which is currently functional and this provides good employment opportunity for economic development of the region.

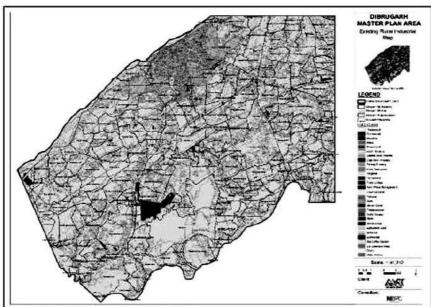


Figure 57 Existing Industrial Landuse - Rural Area

4.2.4 PUBLIC & SEMI-PUBLIC

The Public & Semi-public Landuse in the rural area is about 1.29 sq.km which is around 0.36 % of the total area of the village area. The rural area accommodates Dibrugarh Airport as major public place.

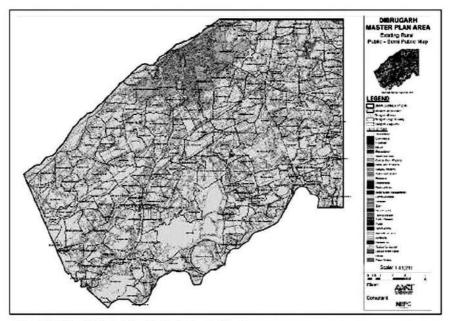


Figure 58 Existing Public and Semi-Public Land use - Rural Area

4.2.5 OPEN SPACES

The recreational land use within the rural area accounts to 1.36 sq.km which is around 0.38% of the total area of the region. The important recreational sites within the rural area are Khanikar park and botanical garden near Jokai reserve forest.

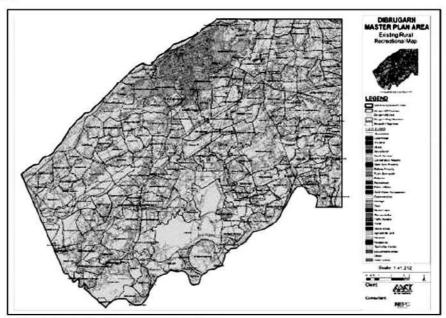


Figure 59 Existing Open Space Land Use- Rural Area

4.2.6 TRAFFIC & TRANSPORTATION

Traffic & Transportation covers 7.25 sq.km which is around 2 % of the total area of rural land cover. Large land parcels coming under the traffic & transportation land use in this area is Airport.

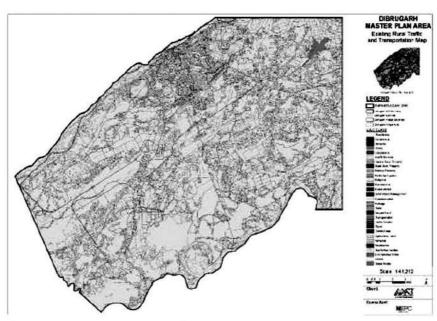


Figure 60 Existing Transportation Land Use - Rural Area

4.2.7 VACANT

In Dibrugarh rural around 8 sq.km of land is vacant as on year 2020, which accounts for 2.21% land of the total rural area

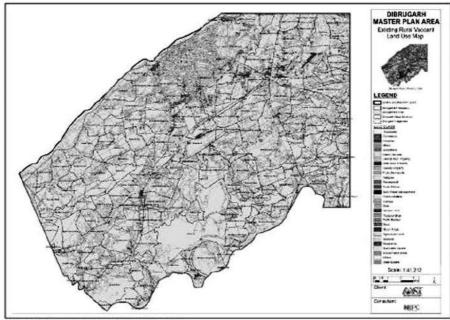


Figure 61 Exisitng Vacant Landuse - Rural Area

4.2.8 PROTECTED & UNDEVELOPABLE USE

Rural Area has 61.21 sq km of area falling under protected and undevelopable land use zone. Majority of the area falling under this category is covered by Jokai Reserve, Brahmaputra River line and Wetlands.

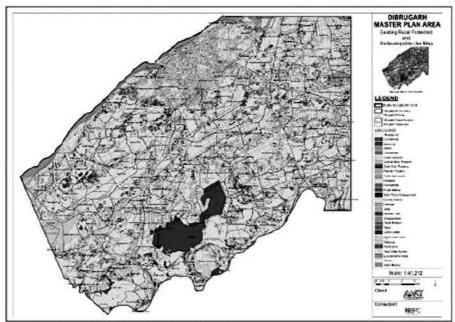


Figure 62 Existing Undevelopable Landuse - Rural Area

4.3 DIBRUGARH PLANNING AREA - 2020

The overall existing land use analysis chart for Dibrugarh Planning Area - 2020 is shown in figure 63. Agricultural land use occupies 37% of the total area of the Dibrugarh Planning Area, Tea gardens occupies around 22 % of the land area and residential land use is spread over 10% of total land area of the planning area. About 2.4% of the planning area is currently lying vacant, 2.15% is under traffic and transportation use, 1.26% is in industrial land use category and 0.39% of the Dibrugarh Planning Area land is under Public and Semi-Public land use category.

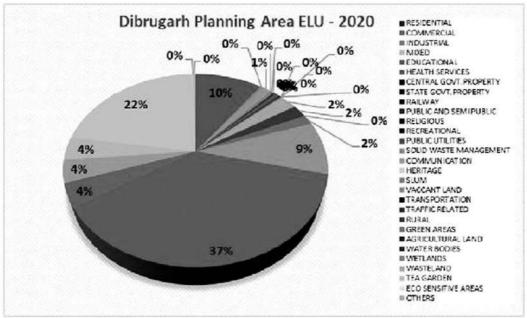


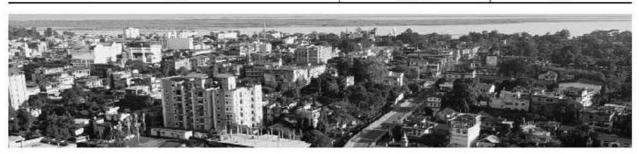
Figure 63 Landuse breakup of Dibrugarh Planning Area - 2020

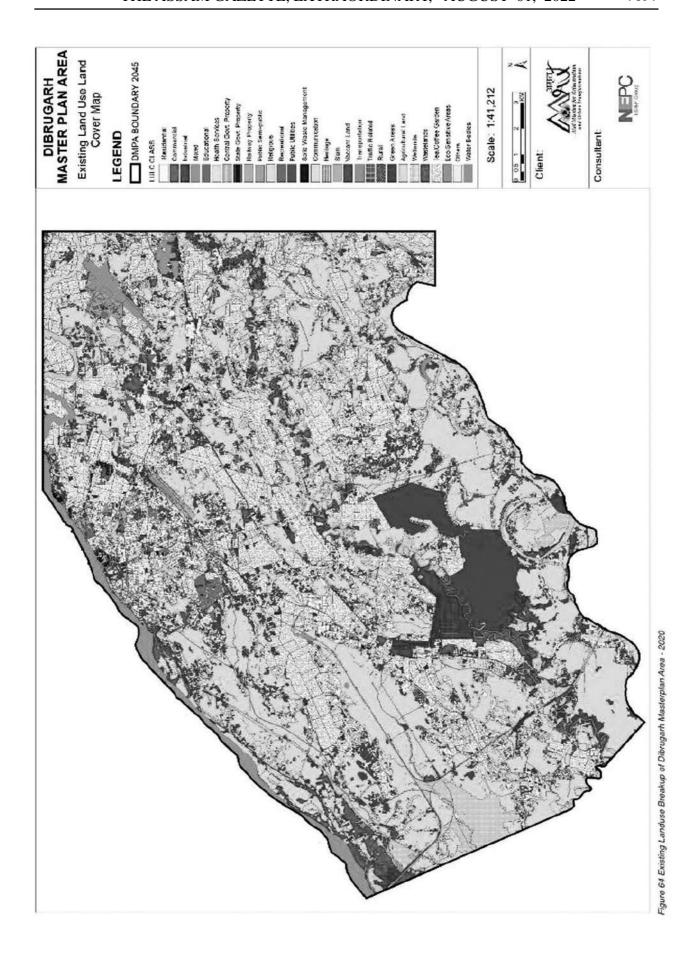


Details of Existing Land Use analysis-2020 is shown in table 74, agricultural land use being the predominant land use in the planning area occupies 143.35 sq.km area, Water body or Protected and Undevelopable use is spread over 65.79 sq.km, residential use covers 39.2 sq.km and 9.8 sq.km is currently vacant. Priority should be given to utilize the vacant land to address the future residential requirements of the planning area and compacting the development should be kept as a key point in the preparation of GIS Based Master Plan-2045 to avoid sprawl.

Table 74 Existing Landuse Analysis for Dibrugarh Developable Area

SI. No.	Landuse Type	Area (Sq Km)	Percentage Area (%
1	Residential	39.2	9.85
2	Commercial	1.19	0.36
3	Industrial	4.95	1.26
4	Mixed	0.30	0.07
5	Educational	1.94	0.48
6	Health Services	0.40	0.10
7	Central Govt.Property	0.56	0.14
8	State Govt.Property	0.84	0.20
9	Railway	0.46	0.10
10	Public And Semi Public	1.55	0.39
11	Religious	0.29	0.07
12	Recreational	1.71	0.42
13	Public Utilities	0.11	0.03
14	Solid Waste Management	0.08	0.02
15	Communication	0.005	0.00
16	Heritage	0.005	0.00
17	Slum	0.24	0.07
18	Vacant Land	9.8	2.47
19	Transportation	8.49	2.15
20	Traffic Related	0.03	0.01
21	Village Abadi	6.52	1.67
22	Green Areas	34.97	8.94
23	Agricultural Land	143.35	37.07
24	Water Bodies	16.32	4.02
25	Wetlands	14.73	3.82
26	Wasteland	14.4	3.84
27	Tea Garden	86.72	22.10
28	Eco Sensitive Areas	0.18	0.05
29	Others	1.73	0.44
	Total	391.00	100





Entire DMPA (Sq Km) SI. No. Landuse Type Conurbation Area (Sq Km) Rural Area (Sq Km) Residential 9 50 29.70 Commercial 0.53 2 0.66 1.19 Industrial 0.25 4.70 4.95 4 Mixed 0.20 0.10 0.30 1.44 5 Educational 0.50 1.94 Health Services 6 0.20 0.20 0.40 7 Central Govt Property 0.20 0.36 0.56 State Govt.Property 0.50 0.34 0.84 Railway 0.20 0.26 0.46 Public And Semi Public 129 10 0.26 1.55 11 Religious 0.09 0.20 0.29 12 Recreational 0.35 1.36 1.71 **Public Utilities** 0.09 0 11 13 0.02 14 0.05 0.03 0.08 Solid Waste Management 15 Communication 0.005 0.005 16 Hentage 0.005 0 005 17 0.24 0.24 8.00 18 Vacant Land 1.80 9.8 19 Transportation 1.24 7.25 8.49 Traffic Related 0.03 20 0.03 21 Vilage Abadi 6.52 6.52 Green Areas 0.75 34.15 34 97 22 23 Agricultural Land 2.23 141.12 143.35 24 Water Bodies 12.58 3.74 16 32 25 Wetlands 0 43 14.30 14.73 14.10 26 Wasteland 0.30 14.4 83.42 86.72 27 Tea Garden 3.30 28 Eco Sensitive Areas 0.00 0.18 0.18 29 Others 0.03 1.70 1.73 27.04 363.95

Table 75 Comprehensive Existing Landuse Analysis if DMPA - 2020

The Existing Land Use area for entire DMPA as well as for two categories is presented in the table above. As it is observed from the table that, in conurbation area, there is very less vacant area available which indicates that Dibrugarh town has no further scope of development. Thus, for the town the focus is to conserve the existing buildings or redevelopment in conformity with the heritage importance and special regulations for urban area.

While concentrating on the rural area it has good amount of Agriculture and Vacant area which opens up the scope for development in the area. Additionally, it has large amount of area falling under residential and Public Semi Public categories making it clear that the inflow of people is already there due to various reasons.

However, conurbation area is located near to CBD and includes area which are observing good amount of development, it is envisaged that the conurbation area will have the highest development in the upcoming years.

As observed from the table above, in the areas outside of conurbation, most of the land is under agricultural use as this is rural area. Thus, more than 60% of the area falls under agriculture use and Tea gardens followed by waterbodies. Very less area is covered for residential, commercial, industrial etc.

5 TOURISM AND HERITAGE

Tourism is a social and economic phenomenon that heavily influences contemporary society. Nowadays, tourism industry can be considered as business behaviour since it might influence the development of a local economic. Tourism is considered as an important industry which has vast scope for the generation of income and employment. It is one of the world's fastest growing industries, a major source of foreign exchange earner of a nation and a measure for resolving interstate and inter community conflict.

Tourism sector is emerging as the largest service industry for generating employment and boosting economic growth, having forward and backward linkages. Dibrugarh has earned a name in the field of Tourism attracting tourists from both inside and outside India. Jagannath Temple, Bogibeel Bridge, Tea Gardens, Golf Courses, Dibrugarh town and the various natural scenic sites and religious sites attract tourists to this place.





5.1 INDIAN STATE'S/UT'S WISE TOURISTS INFLOW.

Assam Stands 22nd in the Tourism sector when compared with other states and UT's. But in case of North Eastern States, Assam stands 1st in the Tourism Sector.

SI. No.	State/UT	tate/UT Domestic Foreig		SI. State/UT		Domestic	Foreign	
1	Uttar Pradesh	1161297774	97774 3130437 19 Odisha		Odisha	12314442	71666	
2	Tamil Nadu	338635730	4703343	20	J&K	9279798	60888	
3	Andhra Pradesh	137377204	289809	21	Haryana	7389246	317205	
4	Karnataka	124813271	549127	22	Assam	5326222	18703	
5	Madhya Pradesh	114233039	392280	23	Goa	5203242	611082	
6	Maharashtra	109959868	4539483	24	Puducherry	1347741	111795	
7	Telangana	94838573	146324	25	Chandigarh	1128173	30544	
8	West Bengal	72326850	1509100	26	Daman &Din	808556	5764	
9	Gujarat	39270686	314363	27	Meghalaya	791026	8252	
10	Rajasthan	38341344	1494520	28	Sikkim	726183	52246	
11	Jharkhand	33234408	168614	29	Dadra & Nagar Haveli	558428	1844	
12	Punjab	32249844	451052	30	Arunachal Pradesh	368971	6152	
13	Uttarakhand	30001151	111494	31	Tripura	366895	35833	
14	Bihar	28272623	967134	32 Andaman & Nicoba		340618	15070	
15	Delhi	26859442	2449626	-	Island	340018	13070	
16	Himachal Pradesh	17561398	429439	33	Manipur	148404	3162	
17	Chhattisgarh	17431156	7807	34	Mizoram	66922	870	
2000 10 A.J.	VACAD PROVIDENTIAL AND SATE OF A TOTAL	THE CONTRACTOR OF THE PARTY OF	z zestwa CP ZP III.		1800 100 1 (8)			

Table 76 North Eastern States Wise Domestic Visitor Arrival in Assam (2005 - 2016)

(Source: State/Union Territory Tourism Department, Ministry of Tourism)

61397

3015

Nagaland

5.2 OVERVIEW OF TOURISM IN THE NORTH EAST

1007949

12819054

Kerala

18

The location of the region is strategically important as it shares its border with Bangladesh, Bhutan, China, and Myanmar. The natural beauty of the place, rivers and mountains, Buddhist monasteries, serene natural environment, exotic flora and fauna, unique tribal culture, folk dance and music in the North Eastern region together offers an opportunity for development of tourism in the region.

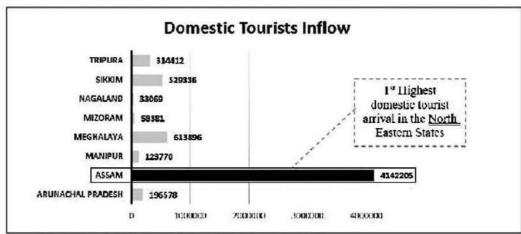


Figure 65 North Eastern States Wise Domestic Visitor Arrival in Assam (2005 - 2016)

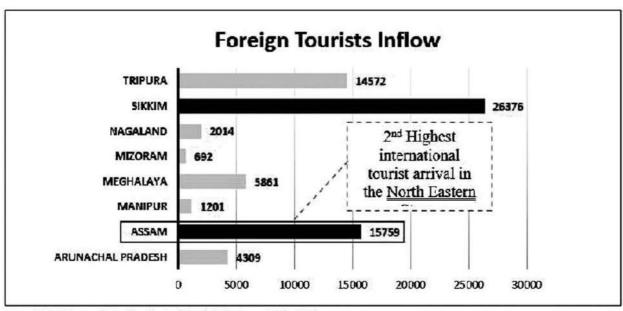


Figure 66 North Eastern States Wise Foreign Visitor Arrival in Assam (2005 - 2016)

(Source: State/Union Territory Tourism Department, Ministry of Tourism)

5.3 ASSAM STATE TOURISTS INFLOW

The tourist in-flow of the Assam state shows that maximum tourist arrivals are the Domestic tourists and it clearly depicts that there is a growth in the Tourism Sector from 2005 – 2018. There is a huge scope for Tourism Industry in the Assam state.

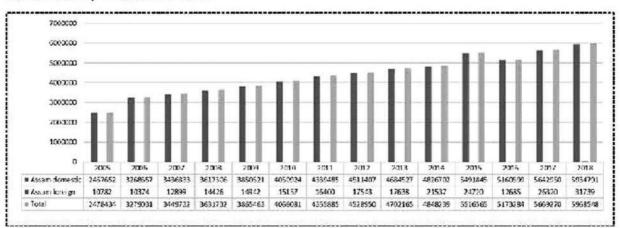


Figure 67 Assam State Tourists Inflow (Source: State/Union Territory Tourism Department, Ministry of Tourism))



5.4 ASSAM DISTRICTS WISE TOURISTS INFLOW

Table 77 District wise tourists' inflow of Assam

SI. No.	Name of the Cities/Towns	Domestic	Foreign	Total	
1	Guwahati	607989	2202	610191	
2	Tinsukia	123327	323	123650	
3	Dibrugarh	115172	408	115580	
4	Jorhat	97512	431	97942	
5	Silchar	68183	127	68310	
6	Tezpur	51093	234	51326	
7	Dhubri	45170	55	45225	
8	Subsagar	41961	188	42149	
9	Kaziranga	34915	1789	36704	
10	Barpeta	29366	91	29458	
11	Lakhimpur	25841	12	25853	
12	Goalpara	24325	48	24372	
13	Golaghat	22182	7	22189	
14	Nagaon	18252	21	18273	
15	Dhemaji	5910	0	5910	
16	Morigaon	4542	2	4544	
17	Majuli	327	0	327	
18	Hajo	282	10	292	
19	Namen	224	54	278	

(Source: State/Union Territory Tourism Department, Ministry of Tourism)

In the Tourists Centres of Assam, Guwahati has the highest Domestic and Foreign Tourists Inflow, followed by Tinsukia, Dibrugarh and Jorhat.

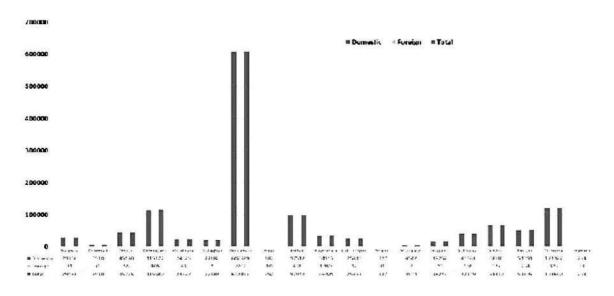


Figure 68 Tourists visits at the Tourists Centres/Districts of the Assam State (April 2005 - March 2006)

(Source: State/Union Territory Tourism Department, Ministry of Tourism)

5.5 TOURISM SCENARIO IN DIBRUGARH

The city of Dibrugarh is quite a colourful, vibrant but tiny location situated in the state of Assam. It is recognized as the Tea city of India quite naturally due to abundance of tea crops that are grown here. The 'Tea City of India', Dibrugarh in the Upper Assam area, boasts of the highest amount of tea production in India. With so many tea gardens and tea estates located in Dibrugarh, the town serves as an ideal place of tea tourism.

The Place is emerging at an increasingly fast pace at being known as the ultimate communication and industrial hub of the popular North East India.

Not only is the place being full of lush green plantations, but the city also offers its visitors with a variety of experiences including adventure activities.

There is tremendous potential in the district of Dibrugarh as far as the travel and tourism industry is concerned. Many sites located around the Dibrugarh town and spread over wide areas within the district serve as the hot bed for a variety of tourism activities, and henceforth requires immediate attention and careful handling of the concerned authorities so as to allow the tourism prospects to grow, develop and flourish.

As per Survey in Tourism statistics in Assam, total number of visitors in Dibrugarh is 1,15,000 (approx.), out of which 400 are foreign visitors. It is third highest when compared with other cities of the state, namely, Guwahati and Tinsukia. The tourists majorly visit Dibrugarh due to its scenic beauty and rich cultural heritage; predominantly, tea estates and national parks.

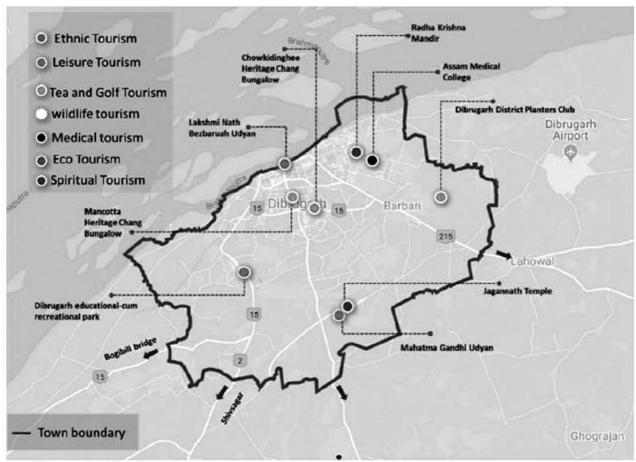


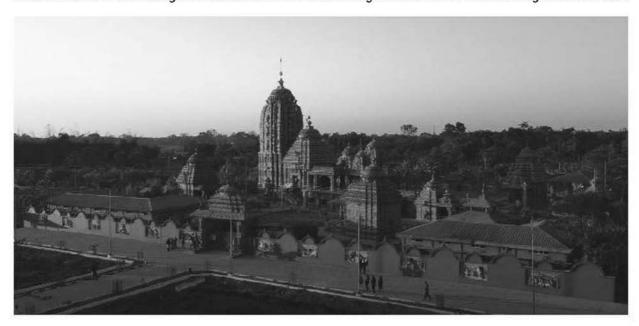
Figure 69 Tourist spots in Dibrugarh and its surrounding region

5.6 TOURISM DESTINATIONS WITHIN 25 KM OF RADIUS

5.6.1 SPIRITUAL TOURISM

5.6.1.1 Jagannath Temple

The Jagannath Temple in Dibrugarh in all ways translocate the essence of the extravagant Vaishnava temple dedicated to Lord Jagannath in Puri, Odisha. Built as a replica of the Temple in Puri, the Temple is constructed at Kanikar area in the Dibrugarh is touted to be the second largest after Puri in terms of magnitude and size.



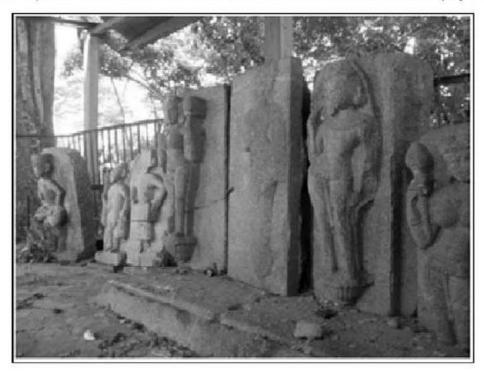
5.6.1.2 Radha Krishna Mandir

It is a temple, built of marble stones near the Assam Medical College campus. Also popularly called the Jalan Mandir.



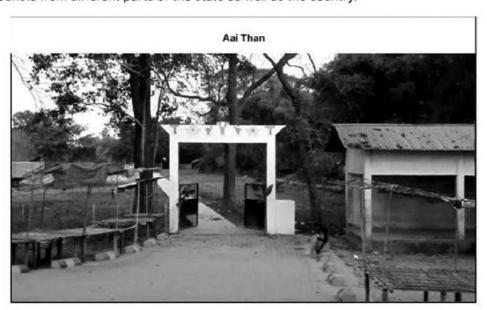
5.6.1.3 Maira Mora Than

Located in the vicinity of the Jokai Reserve Forest, it is presently managed by Sattradhikar Hema Mahanta, the Moira Mora Than, established near the Burhi Dihing River in the year 1703 A.D., has been managed by the same family, a clan of seven generations altogether, who are looking after the Than from the onset. A few statues and sculptures have been excavated in and around the Than and these are displayed.



5.6.1.4 Aai Than

The Aai Than, located on the bank of the river Brahmaputra and close to the Embankment built across the river, is a hugely popular Than in this part of the world, and it attracts a large number of devotees and religious tourists from different parts of the state as well as the country.



5.6.2 ETHNIC TOURISM

Dibrugarh is a melting pot of many tribes – the main communities inhabiting the district includes Ahoms, Tea tribes, Sonowal Kacharis, Chutiya, Muttock, Moran, etc. There are also some Tai speaking Buddhist communities like Tai-Phake, Khamti and Khamyang. With a rich culture, their lifestyles are unique and colourful. Some major ethnic villages located in the district are as mentioned.

5.6.2.1 Namphake and Tipam Phake Village

The Tai Phake is a lesser-known tribe with microscopic population found in the Dibrugarh district. It is 37 km far from Dibrugarh town via NH 215. Though they are small in population, yet they maintain their gorgeous multicoloured custom of their traditional distinctiveness and retain the Tai Phake language and culture. Tai Phake is the branch of the great Tai race, which entered Assam in the latter half of the 18th century. They came through the Patkai range and lived in Mogoung (now in Myanmar) till 1700 A.D. The word 'Phake' has been derived from the Tai words 'Pha' meaning wall and 'Ke' meaning old antiquity. People living near and around the antique stone wall in the due course came to be known as 'Kunphake' i.e. people residing near phake part of the country.

They are also called 'Phakeyal' by the Assamese Indians. They introduce themselves as phakeyat (Jat) i.e. people of phake caste, as there had been no letter pronouncing 'Z' in Tai. In course of time the work 'phakejat' changed into 'phakiyal' and later on 'phakial', which is contested by the phake people. On their arrival in Assam they in search of a suitable land for inhabitation, inhabited the riverine areas of Burhi Dihing's southern Bank creating the biggest Taiphake village in 1850, which is now called as Namphake village.





The salient of attractions of this village are sunset over the Burhi Dihing, boating in the river Burhi Dihing, Pagoda built in 1937, the symbolic Ashoka Pillar, Nong Mungchiringte (Musulinda Tank), traditional stilt house, traditional dances like Kakong (drum dance), Kapan (welcome dance), Kachong (umbrella dance) and Ka Feefai (diamond dance). Poi-Nen-Chi festival is observed in the month of March by this tribe with the belief that offering of Chaitya will help to attain peace in this life and also in the life after that. The Tipam Phake Village is a twin village of the Namphake village. It has the Tai Phake EcoTourism Camp, newly built on the bank of Dihing river.

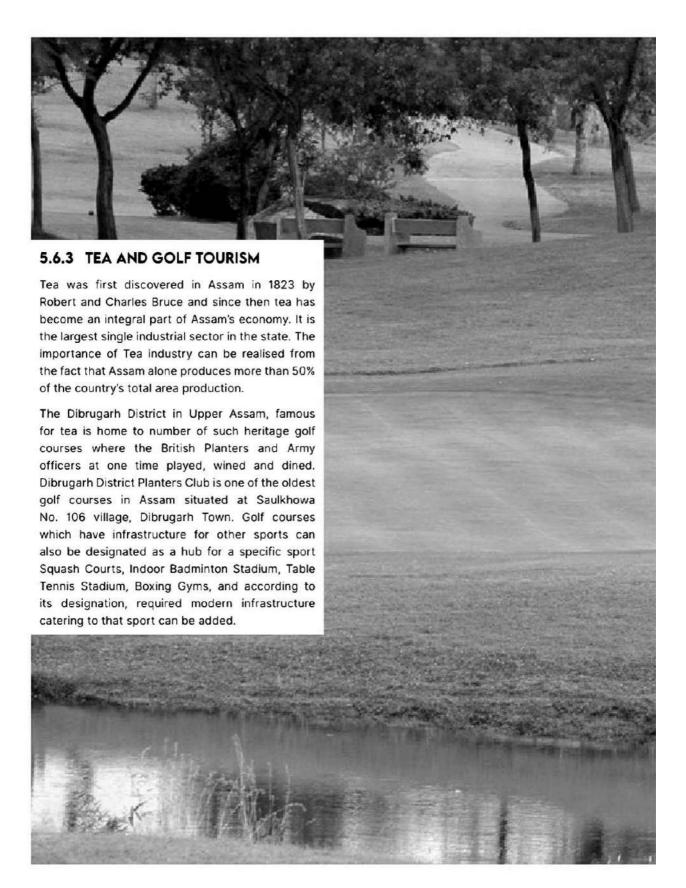
5.6.2.2 Khampti Ghat Village

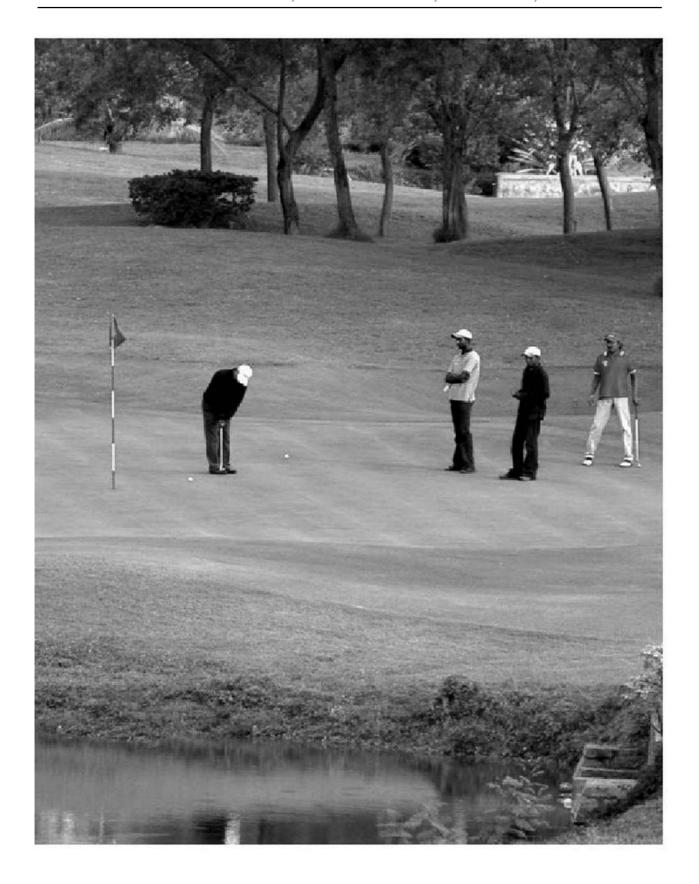
A small Assamese village by the river Burhi Dihing about 12 kilometres from Dibrugarh town. Here, one sees the rural way of living of the Assamese as well as typical Assamese houses made of split bamboo and mud. Almost every house has a fishery, granary, vegetable garden, cattle shed and a loom.



5.6.2.3 Jokai Borbam Village

Situated very close to the Jokai Reserve Forest, it is village reflecting authentically the life of the Assamese. A typical attraction is the Namghar (prayer hall) located in the village centre.





5.6.3.1 Tea Estates

The lush green tea gardens in Dibrugarh is a treasure house of exotic beauty of nature with colourful people and their enchanting songs and dances, sprawling bunglawos, and residential facilities. Dibrugarh is the Tea city of India and the largest Tea exporting City. It is but natural that Dibrugarh is dotted with many large and small Tea Gardens. Dibrugarh has mushrooming growth of tea. Many tea estates and gardens are located, significant among them are: Chauba tea estate, Achabam tea estate, Nahortoli tea estate, Naharkatiya tea estate, Namroop tea estate, Jalannagar tea estate, Deha tea estate, Heritage tea, Abali Organic tea estate etc.

The tea garden landuse in Dibrugarh region is fairly complicated with board categories include tea grown area, functional built up area, facilities, agriculture / crop land, area under afforestation, vacant land, nursery, grassland, soil rehabilitation, wasteland and water body / river. The landuse classes have been generalized as per the NNRMS standard and categorized into 9 classes viz. built up land, agricultural /crop land, wasteland, grassland, nursery, plantation, tea, waterbody and others. The landuse statistics generalized at second level is given in Table below.



Table 78 Distribution of Tea Garden Land Use

SI. No.	Garden name	Area (Ha)	AL	BUL	GL	NUR	отн	PLA	TEA	WB	WL
1.	Mancotta	326.33	31.05	47.95	0	0	2.10	2.52	237.26	0	5.45
			(9.51)	(14.69)	(0)	(0)	(0.64)	(0.77)	(72.71)	(0)	(1.67)
2.	Sessa	753.93	191.96	69.32	2.42	0	20.97	2.77	456.58	4.66	5.25
			(25.46)	(9.19)	(0.3)	(0)	(2.78)	(0.37)	(60.56)	(0.62)	(0.7)
3.	Ghoorania	149.94	0	16.40	1.90	0	0	0	131.64	0	0
			(0)	(10.94)	(1.27)	(0)	(0)	(0)	(87.8)	(0)	(0)
4.	Borabari	63.39	2.02	3.35	0	0	0.54	О	57.46	0	0.04
			(3.18)	(5.28)	(0)	(0)	(0.84)	(0)	(90.64)	(O)	(0.06)
5.	Jamirah	478.34	2.04	65.27	1,31	0	9.20	0	398.87	0	1.65
			(0.43)	(13.65)	(0.27)	(0)	(1.92)	(0)	(83.39)	(0)	(0.35)
6.	Maijan	872.80	137.19	114.50	4.82	0	19.22	О	588.35	5.48	3.23
			(15.72)	(13.12)	(0.55)	(0)	(2.2)	(0)	(67.41)	(0.63)	(0.37)
7.	Greenwood	831.73	48.53	82.48	25.74	0	38.09	0	617.34	1.87	20.70
			(5.83)	(9.92)	(3.09)	(0)	(4.58)	(0)	(73.26)	(0.22)	(2.49)

AL – agricultural land, BUL – built up land, GL – grass land, NUR – nursery, OTH – others, PLA – plantation, WB – water body, WL – wastelands, *Figures in the parenthesis indicate the percent of garden area. (Source: Tea Garden Atlas, Dibrugarh District, Ministry of Commerce and Industry, 2013)



5.6.3.2 Colonial Heritage Bungalows

Most of these tea estates are century old with a rich colonial heritage in the form of colonial style Chang Bungalows. Chang in the local language means "raised on stilts" and the design served multiple purposes both to keep the house cool by allowing fresh air to blow underneath and to keep water and animals out.



Two well know bungalows are Mancotta Chang Bungalow and Chowkidinghee Chang Bungalow located within Dibrugarh town. Both are operated by Purvy Discovery owned by the Jalan Group. They provide well furnished rooms with all modern facilities. Staying in these bungalows is an experience quite distinct from hotels and resorts.

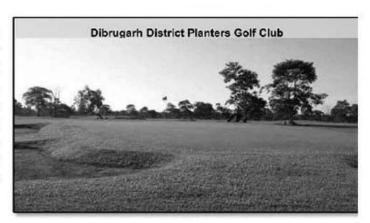


5.6.3.3 DDPC Golf Course

Dibrugarh has some of the finest golf courses with sheer beauty and elegance. In the golf courses, one gets to taste different fairways, bunkers, water hazards, and greens. It has the flat tracts of Dibrugarh; the barrenness of Naharkatia and the woody terrain of Zaloni, to highlight the diversity of the courses.

The DDPC Golf Course took birth on the land of Bokel Tea Estate along with DDPC (Dibrugarh District Planters' Club) in 1955, when the 1878-born Maden Memorial Gymkhana Club was engulfed by the mighty

Brahmaputra. The 9-hole golf course then was 5880 yards in length, rated 67.3 with Par 67. Later in 1998, the 18th Hole was onverted to a Par 4 making the Course 5910 in length, 68 Par keeping the rating same at 67.3. The flat course of DDPC, though thought to be a short and simple one by many, tempts golfers for big hits but unfortunately has Out of Bounds in every hole making the big hitter's life measurable.



5.6.4 MEDICAL TOURISM

Medical Tourism may be broadly classified as provision of cost effective private medical care in collaboration with the tourism industry for patients. Established in 1947, the broad campus of Assam Medical Collage has vast contribution in health care sector and community services in District and surrounding region. It has become much popular as it provides patients with the opportunity to receive top quality medical services at cheaper prices and thereby enjoying healthcare and tourism simultaneously.

Studies indicate that the booming private healthcare sector in the North-eastern region of India has already started working catalyst in promoting tourism in the region. Owing to its geographic proximity as well as language and cultural linkages, this region has enormous potentiality to be medical tourism hub for the state like Assam.



5.6.5 ECO TOURISM

Dibrugarh being heavily rain fed boasts of wet evergreen forests, tropical moist deciduous forest, canebrakes and grasslands. They support a wide variety of flora and fauna, many of which are highly endangered.

5.6.5.1 Jokai Reserve Forest

The Jokai Reserve Forest, located around 12 km away from the Chowkidinghee Chariali point, happens to be the natural habitat for a number of flora and fauna, with variations strictly marking from a wide variety of monkeys to different species of deer, wild cats, hornbills, cranes, storks, woodpeckers and kingfishers. The forest has an area of 23.08 sq.km., and it has within it the Jokai Botanical Garden cum Germplasm Center.

The sweet fragrance emanating from the various colourful and scented flowers, bearing different contours and textures and having their own well defined set of domains and attractions, have heralded the arrival of a magical number of unique butterfly species, which have prompted the concerned authorities and the naturalists to strive towards declaring Jokai Reserve Forest as a Butterfly Zone, and the Botanical Garden itself as a Butterfly Park.



5.6.6 RIVER TOURISM

Brahmaputra is a huge river. In some places of Assam, it is close to 10 kilometers wide and looks more like a sea than a river. The Brahmaputra is very wide and braided in the district of Dibrugarh. Dibrugarh being present very close to Brahmaputra provides great views of the river which are worthy to watch. The proposed River Front project on the bank of Brahmaputra by Water Resource Division is a huge potential in public realm for recreational activities.

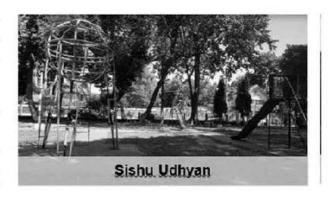
River Burhi Dihing originates in the eastern Himalayas in the Patkai Mountain range. The Burhi Dihing meanders through the plains facing Patkai Hills for a length of 50 kilometers and then enters Joypur-Digboi low hill range. It then comes out near Joypur to flow through the plains for a length of 120 kilometres and ultimately joins the Brahmaputra at about 32 km south-west at Dihingmukh of Dibrugarh District. At the later stage in its course, Burhi Dihing acts as a divider between Dibrugarh and Sivasagar districts.



5.6.7 LEISURE TOURISM

5.6.7.1 Parks

Dibrugarh is also a place having parks/areas of natural, semi-natural or planted space set aside for human enjoyment and recreation or for the protection of wildlife or natural habitats. Those areas are said to be children's unique park of its kind in the state. The parks have the facilities like Toy Train, water activities and various children's play equipment. Major community parks at Dibrugarh town are Mahatma Gandhi Park, Lakshiminath Bezbaruah Park, Dibrugarh University Park, Sishu Udyan (near DC Court), Kushal Konwar Park at Chowkidingee field and park at Jail campus.





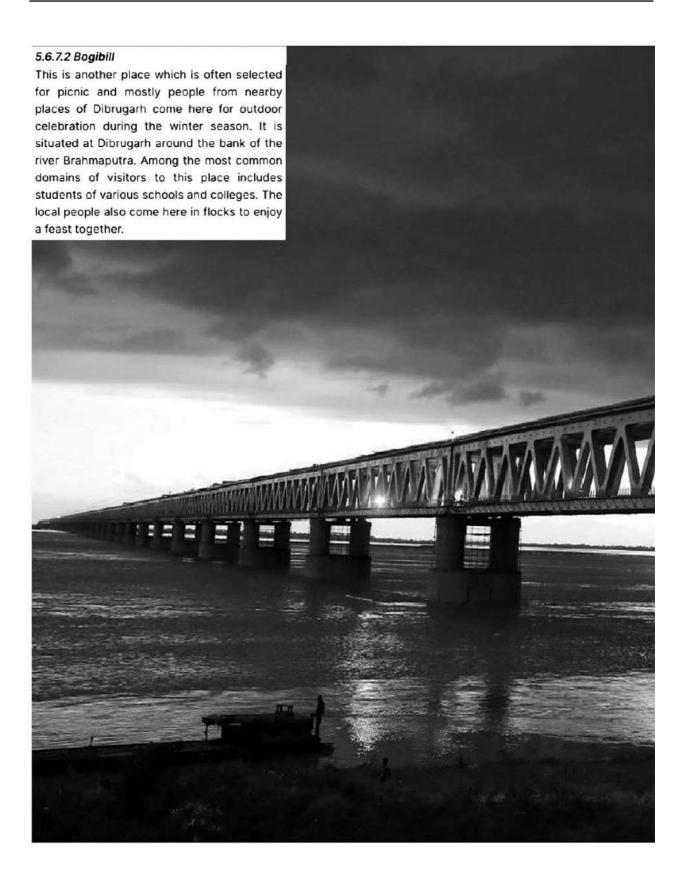
Dibrugarh University Park

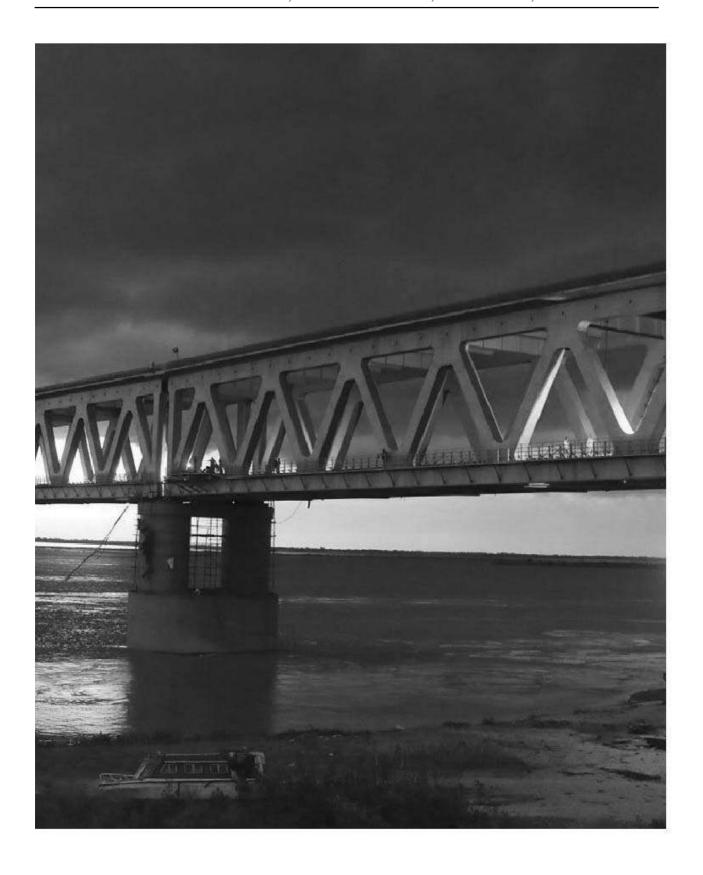


Mahatma Gandhi ParK



Lakshminath Bezbarua Park





5.6.7.3 Khamti Ghat:

Located at a distance of 16 kilometres from the Chowkidinghee Chariali along the Mancotta road, is a popular picnic spot called Khamtighat. It attracts a lot of picnickers in the picnic season, basically between November and February end, from far and wide, and has already established itself to be a picnic spot of repute. The ghat is along the river Burhi Dihing and has got tremendous potential to be developed as a tourist destination. The abundance of greenery, lushy green paddy fields and tea gardens all across the place, make it a natural hot bed to promote Eco- tourism. Moreover, the places near the Khamtighat are naturally blessed with a lot of wetlands and marshy areas, especially Choraihabi, located just on the other side of the river.



5.6.7.3 Dibrugarh University

A new developed park built by Dibrugarh University within its campus showcasing the diversity of Assamese culture. A prime attraction is the replica of Ranghar – the Ahom ear showpiece located at Sivasagar.

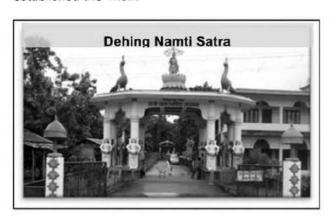


5.7 TOURISM DESTINATIONS ABOVE 25 KM OF RADIUS

5.7.1 SPIRITUAL TOURISM

5.7.1.1 Kunda Aata Than

Kunda Ata Than, located on the bank of the river Brahmaputra in the Rohmoria area of Dibrugarh district, 33.3 km far from Dibrugarh town via NH 15. It can be best regarded as the only Than in the entire district, which has evolved out of Mongoloid origin or has got a Mongoloid touch to it. The Than was established in the year 1819 A.D., though some sources presume it to be established a few years earlier in the year 1799 A.D. It was established by Kunda Ata Dangoriya, who was of Mongoloid origin, and he came to the site of the present Than with Rongacharan Dangoriya. After the demise of Rongacharan Dangoriya, Kunda Ata assumed the charge of the Sattradhikar and he established the Than.



5.7.1.3 Dinjoy Satra

his satra was first established by a prime devotee of Gopal Atadev, Srimanta Aniruddha Dev, in a village of North Lakhimpur. It is 30.5 km far from Dibrugarh town via NH 15. It was later shifted to Khutiaputa, around the time when the Moamoria rebellion took place. During this period, Astabhuj Gosain was the head of the satra. But after his demise, this religious seat remained vacant for 14 years. Later on, Pitambar Chandra Dev was made the head. The satra fell into trouble once again at the time of Burmese invasion of India. It was finally brought to the present site of Dinjan, about 5 km from the township of Chabua, after peace returned.



Around 12 kilometres from the town of Naharkatia, on the banks of river Disang (under Sasoni mouza), is the age old Dehing Namti Satra of Assam. The satra was established by Binandashyam Gohain and was initially situated between the roads of Hologuri and Sariyahtoli, in Dibrugarh.

